

WCARES Field Day 2022

This event starts June 25th @ 1pm and runs for 24 hours

Introduction - by Paul Tampien - KM4PT

This year we are going to have a single location for Field Day for SSB and CW. **The address is 304 Beasley Dr, Franklin (Public Service Center). We will be operating two separate stations, CW and SSB. Digital stations (FT-8 and/or PSK-31) will be at your home QTH. The reason for this separation is to minimize interference on the bands**

We will participate fully in ARRL Field Day as individuals at your home QTH and as one group in a central location, while working together for an aggregate score AND by staying in touch (virtually) throughout the weekend.

Giving credit where credit is due, there are two sources for this interest's planning to carry out this event:

1. The ARRL announced [new rules for the 2023 Field Day](#). One of those specified that the ARRL will publish the aggregate score of a club, based on the log files of its individual members. By specifying "WCARES-TN" in the club name field when submitting our individual logs, our scores will combine for a club score. In this way, we're all working together.
2. Changed rule from last year - Stations are now limited to 100 W Peak Envelope Power (PEP) transmitter output.
3. In 2021, Scott Davis, the author of [N3FJP contest logging software](#), sent an email to his users wherein he discussed how his local club stays in touch during contests. I've included that email at the end of this document for your reference. In short, they use the Discord app to chat with each other AND they share their real-time scoring on the internet. We're going to do both of these things.

My hope is you'll choose to participate in this WCARES event and will use the guidelines in this document to make the most of our virtual weekend together. That said, there's no shame (or judgment) if you choose to go a different route. If that's you, this is a good time to stop reading this document.

Still with me? Let's go!

The Big Picture

There are 6 things that are unique to our 2022 Field Day experience and I've included them here...

1. Digital and CW stations will be combined in an air conditioned portable garage and the SSB station will be in an RV trailer, all using the WCARES callsign ([N4FR](#)). All time slots for operators of these stations are broken down into 2 hour increments. You are more than welcome to operate multiple time slots. [You may also operate from your home QTH using your own callsign.](#)
2. Visitors/observers are welcome but note that the very limited space will make observation problematic for more than one or two at a time. Think of this as just an outlet for those who'd like to stop by for an "eyeball QSO" with whomever is present.
3. There will also be a social event at the same location.
4. Playing as Individuals but working toward a common goal. - The ARRL announced that people submitting Field Day logs as individuals could also specify a club name - and all of the logs that bear the same club name will be aggregated for a total club score. This change of the Field Day rules will allow us to compete as individuals but adds the fun of working together for the good of the group score.
5. Seeing each other's progress and our combined score... - Having our computers networked together during previous WCARES Field Days, we took advantage of the N3FJP logging software's ability to show our combined score in real-time. While we won't be networked together this year, the N3FJP logging software has another trick up its sleeve that WILL allow us to see each other's progress and our combined score! This is pretty cool. Here's how it works...

When configuring the N3FJP logging software, there is a "Settings Menu" choice called *Web Upload Contest Status*. (Detailed configuration instructions are found later in this document.) You can configure N3FJP to upload your contact statistics to the internet every few minutes. Then, a separate N3FJP program (running at my house) looks at all of the cloud files and builds a custom web page showing our total club score AND the statistics of each participating station! By simply keeping a web browser open all weekend to that special web page, we'll all be able to see each other's progress and keep track of our combined score. The web page where the live scores will be shown is: <http://wcares.live>

6. Live chat all weekend. - Another way to hang out together is through a live chat room where we can type messages to each other, post photos, etc.

A WCARES "server" with the [Discord](#) online service has been set up. By creating your free account on [Discord.com](#), you can then click a special link that will grant you access to our "server"/chat area. I'll include that special link later in this document.

To-Do's: Before, During, and After

Prior to Field Day

- Purchase/Configure/Test [N3FJP Logging Software](#)
- Configure CAT interface for automatic band/mode logging
- Configure CW interface if using CW with keyboard macros
- If using N3FJP, configure Web Upload Contest Status
- Create a [Discord](#) account
- Click the special link to gain access to the WCARES server
- Explore WCARES Chat Room
- Read the Field Day rules
- Determine your "Class" for the event
- Check your antenna(s)
- Get your station ready (including power source)
- Brush up on your Field day operating techniques per mode
- Read Carl Sibilski's propagation information in this presentation he made for WCARES in 2018:
https://wcares.org/wp-content/uploads/2018/06/2018_FIELD_DAY_PRESENTATION.pdf

During Field Day Weekend

- Check/update your computer's clock for the correct date/time
- Confirm your logging software is working correctly
- If at home, use your own call sign (the Field Day location operators will be using **N4FR**)
- Chat with other WCARES members online using the Discord chat room app
- Check the progress of others online at: <http://wcares.live/>

To-Do: After Field Day

- Export your log using the Web Applet in a "Dupe Sheet" format
- Use ARRL web app to submit your entry (and upload your log)

Schedule of Operators (use the link below)

<https://docs.google.com/spreadsheets/d/1Ti67f0Y1P9awctqqWEn55fl10wHdsCfpI-Uklvfr2MA/edit?usp=sharing>

All the Regular Field Day Stuff...

Providing detailed information and advice about working Field Day efficiently and effectively is beyond the scope of this document. You'll find many articles and videos on the topic of contesting best practices. Google is your friend. We'll address some of these things in the WCARES Monthly Meeting prior to Field Day.

It's up to you how seriously you want to take this event. You can operate casually and make a few contacts or you can go nuts and try to earn the maximum points possible.

Everybody should read the official ARRL rules.

Read them online in a web browser here: <http://www.arrl.org/field-day-rules>

Read them in a PDF, suitable for printing here: <https://contests.arrl.org/ContestRules/Field-Day-Rules.pdf>

If you want to maximize the points you earn in the contest, you will need to read the official rules and take note of the bonus points and “power multipliers” that are the key to boosting your score. See “Section 7. Scoring” for the details.

In a nutshell, ***you'll score the most points if you do the following:***

- Run 5 watts (QRP) on battery power during the entire event
- Make as many contacts as you can. This will require you to work multiple bands and/or modes.

That is how WCARES achieved the #1 EOC and Top 10 (#9) Overall score in the country several years ago.

Even though you will score the most points that way, you naturally won't make as many contacts at 5 watts as you will at 100 watts.

Watering Hole Frequencies?

Andrew Gossett had a great suggestion (given to me using our Field Day chat room)...

It could be very useful to have a suggested “watering hole” band plan for WCARES members looking to contact other WCARES members. It would be fun to try to work as many WCARES members as possible.

Rather than publishing a schedule here, let’s coordinate it in our online chat room during Field Day.

Check the field-day chat room (see the Discord.com account set up instructions later in this document) at the following times to learn which bands are available to contact other WCARES members...

Saturday: 4:00pm, 7:00pm, 10:00pm

Sunday: 9:00am, Noon

Logging Your Field Day Contacts

If you're reading this, I'm going to assume you're planning to log your contacts and submit them to the ARRL after the event. It will help WCARES achieve a higher score if you'll specify "**WCARES-TN**" in the Club Name field when submitting your log. By doing this, our individual scores will combine for the WCARES "club" score. But, hang on, I'm getting ahead of myself...

When you upload your log file to the ARRL, you'll fill out a form on their website and then upload your log in the Cabrillo file format or as a Dupe Sheet. Every ham radio contact logging software package includes the ability to export Cabrillo files. While it's true that you can still submit paper logs, word on the street is that *a kitten dies every time someone submits a paper log* in this day and age. Let your conscience be your guide.

I strongly suggest you use the ARRL Field Day Contest Log software by N3FJP. This is the software we've used to log our Field Day contact for years. It's easy to use, it's tailored to Field Day, and it's available for only \$8.99 on Scott Davis' website: <http://www.n3fjp.com/fieldday.html>

Those of you who have previously purchased the N3FJP Field Day software will want to **update to the latest version (ver. 6.3)**. It's a **free update** that includes the new Prince Edward Island (PE) Section (added in 2020) and the ability for Class D stations to work other D stations (thanks to the temporary waiver granted for 2021).

Launching the N3FJP software will, by default, present you with a setup form where you'll enter your call sign and other information for your station. (Remember you use your own call sign - NOT N4FR!)

While logging your contacts during Field Day, it's very convenient if your radio is connected to your computer via a USB cable or serial port. If the computer can "talk" to the radio, the software can automatically log the Band, Mode, and Frequency for each contact. You may have heard of this called "CAT (computer-aided transceiver) Control". Under the Settings menu in the N3FJP software, there is a "Rig Interface..." menu choice that you'll use to configure your radio. I know from experience that without this computer/radio connection it's easy to forget to change bands in the software when you change bands on the radio. You might have made several QSO's before you realize that your log is wrong... and have a hard time remembering when you switched bands!

The WCARES CW folks are familiar with configuring N3FJP for transmitting morse code using keyboard macros so I won't go into it here. If anyone wants to try it for the first time, I'd be happy to help you set up N3FJP the way that Tim Kreth (AD4CJ) has taught us all to set it up for the last few years.

SSB people might want to "get fancy" and record audio files a) calling CQ and b) giving the contest exchange. If your radio doesn't provide the native capability of transmitting audio files, you might consider configuring N3FJP to do so. This can really save your voice during a long contest. Under the Settings menu, the menu choice "Transmit->Phone Setup..." is used to configure this.

For questions regarding WCARES Field Day 2022, contact Paul Tampien - KM4PT@arrl.net

As you log each contact, there are only three fields to enter:

Call - the call sign of the station you are communicating with.

Class - A number + letter combination that indicates the number of transmitters and working conditions of the other station. See "Section 4. Entry Categories" here in the official rules for more information...

<http://www.arrl.org/field-day-rules>

Section - A two or three letter designator for the geographic area of the other station. A printable version of the official section list can be found here:

<http://www.arrl.org/files/file/Contest%20-%20General/ARRL%20Contest%20Sections%20List-%20rev%2004-2020.pdf>

Note: don't forget that the Band and Mode are required to be set correctly for each contact.

Interestingly, the actual frequency of the contact isn't required but the Band and Mode are. Setting up CAT Control is highly recommended so you don't have to worry about changing these things when you change bands or modes during the contest... let the computer poll the radio for the information as each contact is logged.

WCARES members are allowed to work each other during Field Day. However, something that we need to stress is, since we're running as N4FR this year, if you have a shift at N4FR, you cannot contact N4FR from your home.

After The Contest - Submitting Your Log

Congrats! The twenty-four-hour event has come to an end and you've got some contacts to contribute to the group score. Awesome.

The ARRL wants you to use their web app form to submit your entry at: <https://field-day.arrl.org/fdentry.php>

When you go there in your browser, **you're going to be asked to fill out a form AND to submit your contacts.**

You can give them your contacts in the form of a Cabrillo formatted log OR a "Dupe Sheet" (which is simply a text file of your contacts categorized by band/mode with the call signs sorted alphabetically).

N3FJP can create Cabrillo files. And, on that same screen where Cabrillo files are created, there is a button labeled "Write Dupe File" that will create a Dupe Sheet for you.

To submit your Field Day entry to the ARRL, do this:

1. Delete any contacts from your log that you know need to be deleted. (This could include any early contacts you created while testing.)
2. In the N3FJP software, click the File menu and choose "Write Cabrillo (Contest Submittal) File..."
3. **In the pop-up form that appears, you can ignore all of those data entry fields!** (You're going to fill out those fields online on the ARRL website.)
4. At the bottom of the screen, click the button labeled "Write Dupe File" and you'll be prompted to save the Dupe Sheet file to your computer. (This is a text file that you can open with Notepad or any text editor.)
5. You may also want to click the button labeled "Write / View Summary File" as this file contains a breakdown of the number of contacts per band/mode that you'll need when filling out the ARRL web form. (You can derive this information from the Dupe Sheet but it's broken down into a more easily viewable table in the Summary file.)

Okay, you've got your Dupe Sheet (or Cabrillo formatting log file) and you may also have your Summary file. It's time to go to the ARRL Field Day data entry form to submit your entry.

<https://field-day.arrl.org/fdentry.php>

The one important thing to remember when you submit your entry is to enter "WCARES-TN" in the field labeled Club or Group Name.

View Live Scores During Field Day

Everyone using the standard N3FJP software to log their Field Day contacts can contribute to the group score in real-time. Do this by configuring N3FJP to upload your contacts on a periodic basis. (The next section of this document shows you how to configure the software for this purpose.)

During Field Day weekend, view individual scores and our group score by going to this web page:

<http://wcares.live>

When you go to that site on Field Day, you'll see a web page like this:

N4FR (WCARES) Total Score = 1,891,383

Current status: 06/05 03:59 UTC

Total uploader currently off line. Please see individual upload pages.

Call	Score	QSOs	20 Min	60 Min	Frequency
W3JX	1,554,656	911	0	0	28.44600
WC3N	336,567	429	0	0	
N4CCB	133	89	0	0	
N3FJP	27	18	0	0	

N3FJP Software: www.n3fjp.com

Serving the Amateur Radio community with contesting and general logging software since 1997.

The program that produces this live web page will be running on a computer at my house. Leave your browser open to this page and it will automatically reload every 60 seconds.

Configure N3FJP to Upload Your Log Statistics

Automatically upload your log statistics so we can include your QSO's on our live web page (which will be seen at <http://wcares.live>).

In the N3FJP Settings menu, choose "Web Upload Contest Status" and the following screen will appear. **Ignore all of the text on the right-hand side of the screen.** Use the instructions on the following page to configure this screen properly.

Web Contest Status Uploader

Call, Club or Group Name (Web Page Title)

YOUR_CALLSIGN

Message Ex: Your Call / Club Name Field Day Status

Use to remind folks coming later of any needed supplies (ice, bug spray, coax connectors, etc.).

Enter a message that others will see if they click on your call sign in the live web page.

☒ Upload web page to the following site:

FTP URL of Your Hosting Site (Ex: ftp://yoursite.com/)

ftp://wcares.live/

Your Hosting Site User Name

wcaresftp@wcares.live

Your Hosting Site Password

wcares

File Name on Website

YOUR_CALLSIGN.html

Forecolor Backcolor (TEST BY CLICKING HERE!)

Black LightBlue ☒ Passive Mode

☐ Create text file for packet distribution

Location to Save Text File for Packet Distribution

C:\Users\Cliff\My Documents\Affimatech\N3FJP S

Upload Frequency in Minutes (3 is default)

3

Recent Contacts to include (10 is default)

10

☒ Include Score Statistics

☒ Include Current Frequency (if known)

☒ Enable Automatic Upload

Status (Look Here For Success Message When Testing)

I added this FTP status upload feature with Field Day in mind and that is how the following description is written, but when users heard that I was working on this feature for Field Day, I started getting requests to add it to all the programs, including AC Log! Using this status upload feature, clubs can see what their club station running AC Log is doing from home, club members can track their club's progress of all supported contests, DXPeditions can post where they are operating, recent contacts, etc., and you can upload your activity as well!

Have you ever had to leave your Field Day site and wonder how your group was doing while you were away? Maybe you'd like to listen along from home, but you can't find the frequency they are running? Perhaps you are headed up to the site and are wondering if there is anything they need that you could bring along? This feature, first coded in July of 2014, is designed to answer those questions!

The concept is simple. Every three minutes (or whatever interval you set), this software will FTP upload your current score statistics, a brief message and your most recent contacts (including frequency if known) to your web hosting site. Simply give the URL to your group members so that they can check via the Internet. This is an excellent way for club members to keep tabs on how it's going and any needs that may develop at your Field Day site while they are away. You can see an example by navigating your browser to:

<http://www.n3fjp.com/fd/fdstatus.html>

This isn't designed with viewing from the general public in mind, but rather a quick status update on the Internet for club members to be able to follow along from home. The HTML coding is minimal, with an emphasis on keeping the ASCII file upload to be as small as possible. The web page may be accessible on the Internet to anyone, but it is likely that only folks you provide the URL to will be able to find your data, so view this primarily as an internal communications tool for your group.

To enable the web upload, you will need:

Upload Now

[View HTML File on Hard Drive](#)

View Packet File

Other Online Sites

Done

Configure the fields on the left-hand side of the screen as follows:

Call, Club or Group Name (Web Page Title)

Enter your call sign here

Message

The message that you enter here, if any, will be displayed on a custom web page that shows your detailed statistics. If someone clicks on your Call Sign on our live web page at <http://wcares.live>, they will see your web page. (See the following page in this document for an example.)

[X] Upload web page to the following site

Make sure this box is checked.

FTP URL of your Hosting Site (Ex: ftp://yoursite.com/)

ftp://wcares.live/ ("ftp" is followed by a colon and two slashes + "wcares.live" + a final slash)

Your Hosting Site User Name

wcaresftp@wcares.live

Your Hosting Site Password

wcares

File Name on Website

Enter your call sign in UPPER CASE + ".html" (Ex: N4CCB.html)

Forecolor, Backcolor, Passive Mode

"Black", "LightBlue", Checked

Create text file for packet distribution

Leave unchecked

Upload Frequency in Minutes (3 is the default)

Leave at 3 and your stats will be uploaded every 3 minutes

Recent Contacts to Include (10 is the default)

Leave at 10 and people will see your last 10 QSO's on your custom web page

Include Score Statistics, Include Current Frequency, Enable Automatic Upload

CHECK ALL THREE

Now, let's test our configuration to make sure data will be uploaded correctly. See the next page...

To test that you have configured the upload screen correctly, do this:

1. Click the “**Upload Now**” button
2. See if the Status line (bottom of the screen) says, “xxx- File successfully transferred”

If you entered everything correctly, you should see the success message at the bottom of the screen.

If there is an error message, check your configuration settings from the previous page. If you’ve checked and re-checked and still can’t get it to work, shoot me an email (batsoncliff@gmail.com) and we’ll schedule a time to look at your screen together remotely via my ZOOM account.

To see what your custom web page will look like, click the blue link underneath the “Upload Now” button that’s labeled “[View HTML File on Hard Drive](#)”. When you do, your web browser will launch and load your custom-generated page so you can take a look at what others will see when they click your call sign at <http://wcates.live>. Here’s an example for you...

N4CCB
 Current status as of:
 2020/06/06 12:40:45 UTC
 2020/06/06 07:40:45 AM Local
 Updates are set to upload every 3 minute(s).
 Your Internet browser will refresh this page automatically every minute.

Message:
 I'll be around if anyone needs help with anything this weekend. (615) 631-2494 or batsoncliff@gmail.com

Current Score Statistics:
 Total CW Contacts = 44
 Total Phone Contacts = 45
 Total DIG Contacts = 0
 Total QSO Points = 133
 QSOs / Hour Last 20 Minutes = 0
 QSOs / Hour Last 60 Minutes = 0
 Total Op Time (breaks > 30 min deducted): 0:57:11
 Avg Qs/Hr (breaks > 30 min deducted): 93.4

Recent Contacts:

Date	Time	Band	Mode	Callsign	Frequency	Country	Sec
2019/06/20	18:45:21	10	CW	AD9TH	28.35248	USA	ORG
2019/06/20	18:44:17	10	CW	N4SDF	28.35248	USA	NH
2019/06/20	18:43:41	10	CW	W9REE	28.35248	USA	ME
2019/06/20	18:43:15	10	CW	K5UY	28.35248	USA	EMA
2019/06/20	18:42:48	10	CW	AD5RE	28.35248	USA	VA
2019/06/20	18:42:22	10	CW	W3TWW	28.35248	USA	NH
2019/06/20	18:41:42	10	CW	A4TI	28.35248	Oman	EMA
2019/06/20	18:41:17	10	CW	N8ER	28.35248	USA	ENY
2019/06/20	18:40:59	10	CW	N4AJS	28.35248	USA	TN
2019/06/20	18:40:34	10	CW	AD4WW	28.35248	USA	SB

Current Frequency:

Created by: N3FJP's ARRL Field Day Contest Log 6.3
 N3FJP Software: www.n3fjp.com
 Serving the Amateur Radio community with contesting and general logging software since 1997.

For questions regarding WCARES Field Day 2022, contact Paul Tampien - KM4PT@arri.net

Live Chat

During Field Day weekend, we can hang out with each other in an online chat room. To facilitate this, we've chosen to use the Discord.com platform.

1. Create your free account at [Discord.com](https://discord.com)
2. Afterward, click on this link: <https://discord.gg/vzTJYNU>

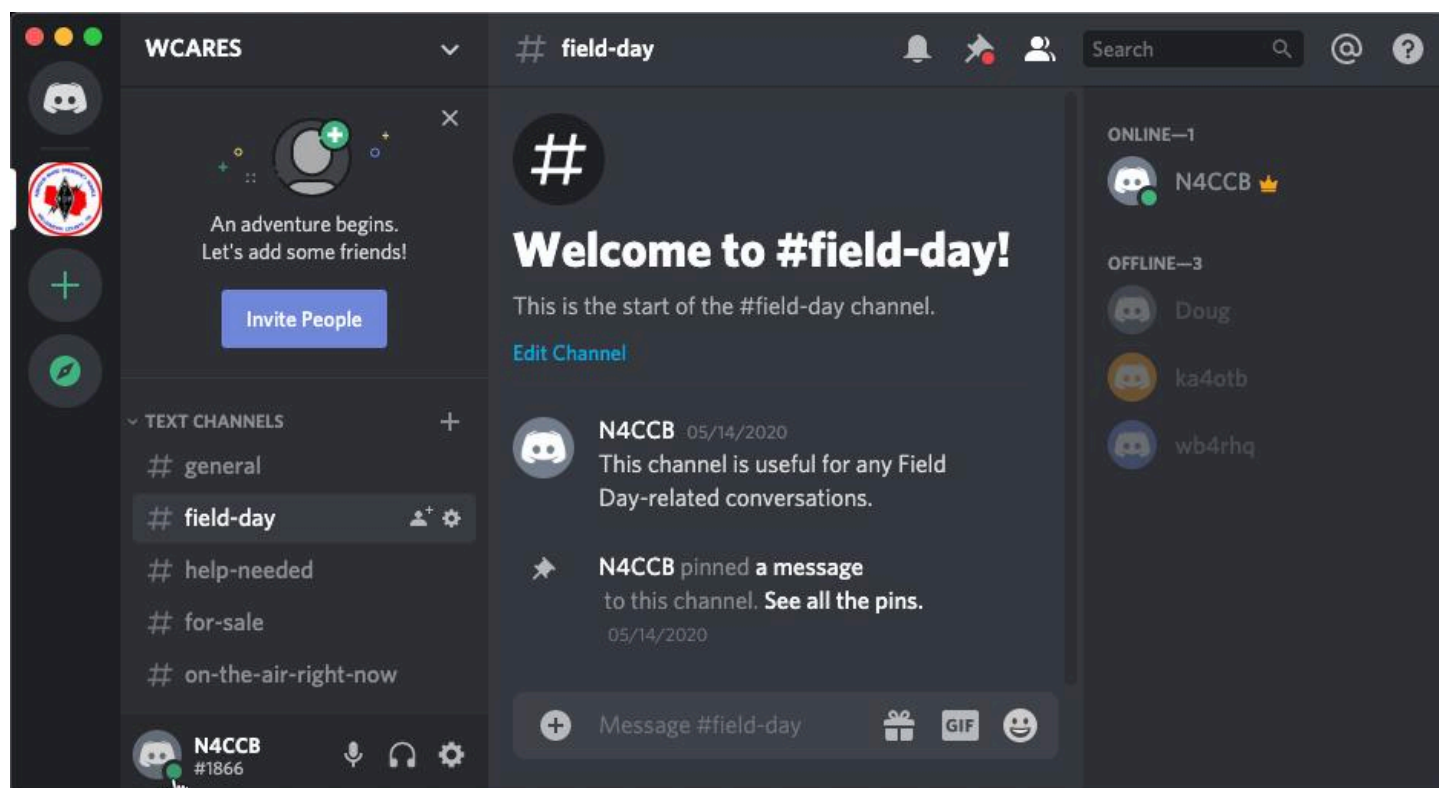
This is an “invitation link” and will grant access to the WCARES “server” forever. (You'll click this link once.)

The WCARES server currently contains the following “Text Channels” (chat rooms)

- general
- field-day
- help-needed
- for-sale
- on-the-air-right-now

These channels are used for live free-form text messages that are meant to be read in real-time.

Use the **field-day** text channel to post messages and/or photos during Field Day. Encourage each other, ask questions, celebrate interesting contacts, talk trash, etc.



For questions regarding WCARES Field Day 2022, contact Paul Tampien - KM4PT@arri.net

From Scott Davis, author of N3FJP software...

(This is where the idea to use Chat and web-based stats came from - Cliff)

How can our group enjoy Field Day together virtually, while staying apart?

Our NEMARC club hangs out together virtually for every major ARRL and CQ contest, so I have a lot of firsthand experience to share with this question! Since we won't be able to physically be together this time for Field Day, operating together virtually is our plan for Field Day 2020 as well.

Some folks enjoy contesting as a lone wolf, spending the weekend in solitary pursuit, but running with the pack and contesting together as a team has more than doubled the enjoyment for many in our club. We all operate from our individual homes and we each submit our own scores, but we thoroughly enjoy each other's company, as well as the fun of seeing our current club total and individual scores in real time on our leader board virtually. Very briefly, here's how:

- We have a text chat group that we set up on the free Discord app, which has evolved beyond contesting. It is our virtual clubhouse. Guys sign in almost every day to chat, alert members to DX, seek help and offer advice. This works beautifully during contests too, as there is lots of fun, encouragement, newer guys can ask questions and others can answer when convenient. Of course we have good natured banter and camaraderie, just as if we were physically together. The virtual clubhouse has become the backbone of our club in many additional ways that would take too long to explain now, but you can get a little more sense of how we use it from this video here:

<http://www.nemarc.org/clubhouse.html>

- We use my free Club Score Processor, so we all can see how we are doing as a club, as well as individually, in real time. The real time leader board display that the processor creates is an automatically refreshing web page. You can be sure all club members keep the leader board and virtual clubhouse displayed on their desktops all weekend. Of course, there is friendly competition within the group, but the key, especially for new folks, is that they understand there is zero pressure and that more importantly, we are a TEAM, working together. Every QSO helps the group, so jump in and have fun!

With ARRL's 1,000 foot Field Day rule, I don't think ARRL will be combining individual scores to create a club total, but there's no reason you can't see how your club fares against other clubs in your region directly. Comparisons to other clubs aside, it is great fun to see how everyone in your club is doing throughout the weekend, evaluating results with similar setups, seeing if someone needs help, etc.

You'll find my free Club Score Processor here: <http://www.n3fjp.com/clubscore.html>

I have lots more information on how you can operate together virtually in this article that I wrote for ARRL (published in August 2016 QST) here: <http://www.n3fjp.com/help/clubcontesting.html>

I am very grateful for this question. These methods have thoroughly revitalized our local club over the last few years. Our membership is growing and we are more active and vibrant than ever. I know they will bring positive energy and lots of fun to your group as well!