

Field Day Preparation

6-8 months before Field Day confirm the History Center is expecting us for Field Day weekend. Contact them as early as possible to fix the date.

March

Circulate sign up sheet to get input for the event. This sheet is currently in Excel Format.

Post a similar request on the LCARA website seeking participants.

Once participants are noted, create a Station Matrix, also in Excel, which will identify the station captains and indicate who will be responsible for what equipment or activity.

Address any voids in the matrix early.

April & May

Repeat circulating the sign up sheet at the club meeting and on the website. Address any missing needs on the station matrix.

Determine if there will be a prepared meal and either confirm it or note there will not be one.

June

Follow up on any open details on the matrix and address them.

Look over the bonus point categories and arrange, assign or otherwise designate persons to handle each one. They are listed in the Field Day Update section.

Encourage station captains to connect their radio to a computer and confirm they communicate. If any problems exist, seek help from club members. N1MM is the most common logging program and requires only a serial to USB cable to interface. A new version, N1MM+, is available from N1MM.com. I suggest you download it.

Plug the cable into the radio and turn it on. Load N1MM. Go to Config, Configure Ports, etc. and select your radio. Click the checkmark to the left of the radio selected and this will show you what COM port the USB adapter is connected to. Select that port.

Under Details click SET to the right of the radio selected and confirm the serial port baud rate and other settings are the same on the radio as they are in N1MM. You may have to go into your radio menu settings to determine baud rate. Suggested settings for the selected radio are shown at the bottom left of the dialog box. If they are not correct, no communication is possible! Click OK. Click OK again. If you have correctly set the parameters, the frequency in the upper left corner of the logging box will be the frequency of the radio.

Setting up N1MM files

Edit Station information

- Go to Config/Change your station data
- Call: N8BC
- Name: LCARA
- Power: 100
- ARRL Section: OH

Nothing else is required

File selection

- Go to File/ New log in database
- Log Type: FD
- Start Date: 2015-06-27 18:00:00
- Operator: Multi-Op
- Band: Whatever you are operating. If multiple select ALL
- Power: Low
- Mode: CW, SSB or Mixed -- whichever is appropriate
- Overlay: N/A
- Station: Portable
- Assisted: Non-Assisted
- Transmitter: One
- Sent Exchange: #A OH (# being the number of stations in operation)
- Operators: Add your call and any others operating
- Click OK
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You will see your mode and the bands listed in the left edge of the logging window with the current band circled.

Visit the storage locker and confirm that the equipment needed is there and works (rotors). The rotors should be set with the indicator needle pointing at **NORTH**. Confirm the necessary hardware required for each tower, 4 stakes per tower base, 3 rope stakes, 3 ropes are available. It's good to check the plastic storage boxes and put the correct number of ropes and rotor controllers in each box. Be sure each box has feed line in it. Higher frequencies, 20 M and up use the large diameter feed line and 40/80 use the smaller feed line.

Confirm tower assembly hardware, (nuts and bolts) are available for each tower. 9 of each are required for each tower.

Check out the generators to confirm they work properly and make sure the gas cans are there and extra oil is available for each generator. Be sure someone is responsible for getting the cans filled! Oil should be placed at each generator.

Confirm the generator outlet /ground rods are available.

The day before Field Day, set up may begin, actually, any time after 0000Z (Thursday night at 2000 hours). It's advantageous to shoot support lines for the dipoles on Friday to speed the setup on Saturday. Other work may be done and still be within the rules.

TOWER (10/15/20M stations)

Each tower requires the following:

- 1 base plate
- 4 ringed base stakes
- 3 rope stakes
- 3 ropes
- 2 standard tower sections
- 1 tower top section with rotor
- 1 mast
- 1 rotor control box with cable
- 9 bolts and nuts
- Feed line
- Barrel adapters to attach feed line to antenna
- 1 boom consisting of two sections including alignment bolt
- 1 set of antenna elements
- 1 pair of tower support posts
- 1 6' step ladder
- Sockets and wrenches for assembly
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Tower Assembly

- Determine north and lay out the tower sections so they point north
- Align the base so that the base tower section may be fitted into the tower base
- Drive the ring stakes into the holes in the base to secure it
- Fit the tower sections together and slide them on the pins of the base. It will be necessary to remove the rear retaining rod in the base to tilt the pins forward
- Insert one bolt in the larger of the two holes in each of the tower legs
- If necessary, insert a mast into the rotor and secure it
- Raise the tower off the ground and position the two support posts a few feet down from the top of the tower, angling them out about 30 degrees. This will allow the antenna to be installed

Antenna assembly

- Assemble the antenna boom using the worm clamp and the small bolt that passes through the boom to keep it from twisting
- There are three sets of elements to each antenna: directors, driven elements and reflectors. Once the boom has been assembled, lay out the elements as follows: The driven element is the center element. The director elements are closest to the driven element and the reflector elements are the furthest from the driven element. There is a colored tape on each of the elements and it serves as a guide to how far

the element is inserted into the element sections on the boom. Insert the elements so that the tape is at the end of the boom element. Be sure the drain holes in the traps are all pointed **downward** on all element sections.

- Loosen the nuts on the U bolts that connect the antenna to the tower mast.
- Stand the antenna up so that it is resting on the director and the drain holes are pointed toward the tower.
- Mount the antenna on the mast, evenly tightening the U bolts. The director element should be closest to and parallel to the ground.
- Attach the rotor control wire and the feedline, providing enough loop in the feedline to allow the antenna to rotate completely without binding. Tape both lines to the tower legs
- Plug in the rotor control box and confirm it works being careful not to damage the antenna elements.
- Tie the ropes on the tower legs just above a brace and about three feet from the top of the tower.
- Drive the rope stakes about 20-25 feet away from the tower base and aligned from tower base as shown. The stakes are driven in about half their length and angled slightly backwards.

- Raising the tower There should be one person on each side rope and two people on the rear rope. At least four people should be pushing on the tower while raising. One person should call the action. During raising, the side ropes stabilize the side to side movement and the tension on the ropes should be increased only after the tower is at 45 degrees to the ground or greater. Pulling on the ropes prior to that will only make raising more difficult.
- Adjust the tower until vertical and tie off the ropes.
- Extend the rotor control and feed line to the station that will be using it.

Generators

There are two larger generators that can each operate several stations. Each generator needs a gas can, a quart of oil and an outlet box mounted on a ground rod. The club trailer has its own generator.

Station requirements

Each station needs:

- Some type of shelter
- Table and chairs
- An extension cord long enough to reach the generator

- Multi outlet connector
- Light
- Computer for logging
- Radio
- Headphones with a splitter
- Ground rod and wire to connect it to the radio.
- Personal needs (insect repellent, beverages, snacks, etc.)
- Operator log sheet

Public relations

Arrange to have the display panels on exhibit in the barn to showcase amateur radio.

After the event, prepare the necessary files following the instructions below:

Files required from N1MM

The following is a guide to exporting the needed files from N1MM

For the Summary:

>File/Export/Print Score Summary to File
Name it FD2017Bandmodesum
Example: ***FD201740CWsum***

For the Log:

>File/Export/Export to file (Generic)
Name it ***FD2017BandModeLog***
Example: ***FD201740CWlog***

Captains, I also need a list of operators at your station. Use the station log provided or include the information when you submit your files or be sure to include all operators on the bottom of the database log information.

Please email these files to AA8OY@arri.net or whomever the Field Day Chairman designates