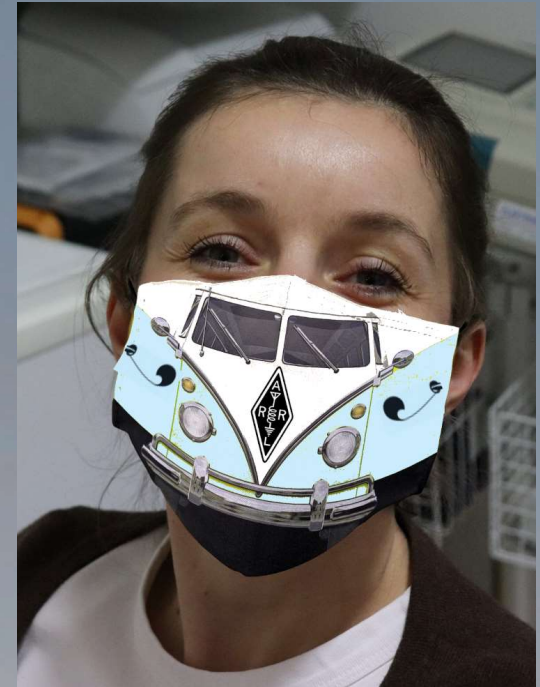




# Field Day 2020



Time for something completely  
different!

Rick – N1RM



# It's different this year

- Physical isolation rules will make many traditional Field Day efforts impractical.
- Many have called this a hinderance
- I think it's actually an opportunity!
  - Real world conditions are causing us to adapt our behavior and be productive within a complex and challenging set of constraints.
  - Sounds a lot like Emcomm!



# It's different this year

- In response to current conditions, the ARRL has made a change to the Field Day rules.
  - In the past, folks using their home stations, not on emergency power got no points for contacting other similar stations.
  - This year they will get points for those QSOs.
  - One-time change – just this year.
- That's the only rule change!



# It's different this year

- In addition, every FD entry this year can specify a club affiliation.
- The ARRL will add up all the scores reporting for that club and publish the total for each club in QST.
- This is *not* a rule change, or a new station class. It's just a new way to report scores.





# Much remains the same

- Except for the one change mentioned earlier, all of the station classes, scoring, and bonus point rules remain the same.
- This year, LARG will not be doing our normal Class A entry, so everyone gets to figure out what they want to do.
- This will be new for many of you, so the remainder of this presentation will discuss some highlights and guidelines.



# You've got to have class!!

- The first thing you need to do is decide on a class for your entry. All the details are in section 4 of the FD rules.
  - Class A: 3 or more people. Must set up your station just for FD where a station doesn't usually exist (portable). Must use emergency power (or be class A-commercial). All equipment must be within 1000' circle.
    - Most opportunities for bonus point activities
    - A large decrease in these entries is expected this year.



# More classes...

- Class B - portable
  - One or two people.
  - Nearly the same as Class A
    - Not eligible for GOTA or “free” VHF station.
- Class F – Emergency Operations Center



# Likely the most feasible...

- Class D – Home station on commercial power
  - Before this year got no points for contacting other Class D stations. This year that penalty is removed.
- Class E – Home station operated on emergency power.
- Class C – mobile
  - Must be “real” mobile installation, normally operated while in motion





# What are the options?

- If you already have a home station, the easiest is Class D.
  - But you can still challenge yourself!
    - Put in lots of hours and analyze the regions to which your station is strongest and weakest.
    - Make that antenna improvement before FD and see how it works.
    - Try a new mode for you. FD is a great place to cut your teeth on different modes.
    - Don't have an HF station?
      - Put something together – now's the time!
      - Elevate that VHF antenna and work folks simplex.



# Turn your D into an E!

- All you need to switch to class E is emergency power (N4PD may try this)
  - Generator: buy, borrow, or rent
  - Battery: you can charge from commercial power prior to FD, or from non-commercial power during FD. For years LARG ran 100W stations for 24 hours from deep cycle batteries.
  - If all your contacts are made with emergency power you get a 100 point bonus.



# Take your E to the next level!

- Battery, QRP: (N1RM may try this)
  - Run from a battery that is charged only from renewable source (e.g. solar).
  - Limit transmit power to 5W.
  - You can still use your permanent antennas, etc.
  - You get a “power multiplier” of 5. Each Phone QSO is worth 5 points! CW or Digital QSO is worth 10 points!!!







# Battery QRP operation thoughts... Power and Heat

- If your rig is *not* designed for QRP you will need a little more battery capacity.
  - It probably draws considerable power, even when not transmitting.
  - If you want to take advantage of weak signal modes like FT8, at least it can handle high duty cycle at lower power.
- If your rig *is* designed for QRP it may not like high duty cycle operation like FT8
  - Smaller PA section means less heat sink.
  - But, it likely draws very little power on Receive.



# Battery QRP operation thoughts... Power and Heat

- To avoid surprises, test it out ahead of time!
  - Measure current on receive and transmit.
  - Key the transmitter for 15 – 30 seconds to see if there are heat issues.
- How about a hybrid approach?
  - I may use KX2 for CW and Phone to save battery, and switch to K3 for FT8/FT4
  - As long as I only use one at a time, it doesn't matter to the score





# How about Class C?

- Do you have a radio operational in your car?
  - Then you have a Class C FD station!
  - Even if it's 2M FM only, park some place high, and work as many folks as you can.
- Remember
  - You must be prepared to log, track dupes, etc.
  - You cannot rig antennas or equipment that isn't usable while your vehicle is in motion.
  - You cannot use repeaters for QSOs.
    - You can use repeaters for traffic handling bonuses (more later)
- If you don't have a radio in your vehicle, get one! It's a great excuse to visit the candy store.



# Bonuses!

- All of the existing bonuses remain in effect this year.
- It is *theoretically* possible for a Class A entry to earn 4250 bonus points!
  - *Very* hard to do, even during a non-COVID year.
- *But*, there are still bonus points to be had!



# Bonus Availability

BONUS	A	B	C	D	E	F
100% Emergency Power	X	X	X		X	X
Media Publicity	X	X	X	X	X	X
Public Location	X	X				X
Public Information Table	X	X				X
Message to SM	X	X	X	X	X	X
Message Handling	X	X	X	X	X	X
Satellite QSO	X	X				X
Alternate Power	X	X			X	X
W1AW Bulletin	X	X	X	X	X	X
Educational Activity	X		X	X		X
Site Visit - Gov't Official	X	X	X	X	X	X
Site Visit - Agency Rep	X	X	X	X	X	X
GOTA	X					X
Web Submission	X	X	X	X	X	X
Youth Participation	X		X	X	X	X
Social Media	GROUPS ONLY					
Safety Officer	X					



# Low hanging fruit

- 100% Emergency Power (7.3.1)
  - 100 points per station
  - Automatic if you do Class E or C
- Message Origination to Section Manager (7.3.5)
  - 100 points
  - Not hard to do. Ask for traffic net info on the reflector.
- Message Handling (7.3.6)
  - 10 points per message, max of 100 points
- Alternate power (7.3.8)
  - 100 points
  - If you have solar panel (or can borrow one) to charge a battery, use it to make at least 5 QSOs.
- W1AW Bulletin (7.3.9)
  - 100 points
  - Bulletin broadcast in Phone, CW, RTTY, PSK31, and MFSK16.
  - Schedule is in Field Day packet
- WEB Submission (7.3.14)
  - 50 points



# Be creative!

- **Media Publicity (7.3.2)**
  - 100 points
  - Make up your own press release and send it to local press. You get the points even if they don't publish it.
- **Educational Activity (7.3.10)**
  - 100 points
  - Can be claimed by Class D and E if you have at least 3 participants.
- **Site Visitation by Elected Official or Served Agency Representative (7.3.11, 7.3.12)**
  - 100 points each
  - Send an invitation to your local elected officials, Red Cross, Salvation Army, Police, Emergency Management, Fire Department, etc. You might get lucky!
  - Make sure you are prepared in case someone shows up!
- **Youth Participation (7.3.15)**
  - 20 points for every youngster (<19 yrs) who makes at least 1 QSO – max of 100 points.
  - Got any kids around the house? They don't need to have a license!





# The Keys to Bonus Points

- Documentation
  - Keep records of anyone that's involved or visits your FD site.
  - Keep records of any messages handled.
  - Take lots of pictures – that's all that is needed for many bonuses. (e.g. picture of generator).
- Think outside the box
  - Find ways to try to meet the spirit of the bonuses within existing constraints.
- Always check the rules to ensure that your station class is eligible for bonuses you claim.



# Some Helpful Links

- ARRL Field Day web page
  - <http://www.arrl.org/field-day>
- ARRL Field Day Packet (the Field Day “bible”)
  - <http://www.arrl.org/files/file/Field-Day/2020/2020%20Field%20Day%20Packet%20Rev%20a.pdf>
- K8ZT presentation on Field Day during social distancing
  - Video: [https://youtu.be/xLk5\\_BlpF6s?t=509](https://youtu.be/xLk5_BlpF6s?t=509)
  - Slides: <http://tiny.cc/fdsd>



# Make 2020 Field Day special!

- Make it a family activity!
- Learn more about your radios and operating them.
- Learn more about what to expect from radio propagation.
- Two things that will never change:
  - 1. *Be Safe – especially this year.*
    - *More than just generator fumes and climbing ladders to worry about.*
  - And 2...



Have fun!!!

*The more you get on the air,  
the more fun it is!!!*



Thanks, 73! Rick – N1RM