

# FIELD DAY: SOCIAL DISTANCING EDITION

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BECAUSE STUPID PANDEMICS ARE STUPID

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# OUTLINE

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- Overview and Breakdown of Field Day Exchange
  - Explanation of “Sections”
  - Explanation of class number
- Breakdown of Station Classifications
- Miscellaneous operating rules
- Point Multipliers
- Bonus Points
- Practical Pointers
- HARC’s Field Day Plan

# THE FIELD DAY EXCHANGE

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K4BFT 4A AL

Call Sign      Class      Section

The diagram illustrates the structure of the call sign 'K4BFT 4A AL'. It is divided into three parts by brackets: 'K4BFT' is labeled as the 'Call Sign', '4A' is labeled as the 'Class', and 'AL' is labeled as the 'Section'.

# THE FIELD DAY EXCHANGE

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AL

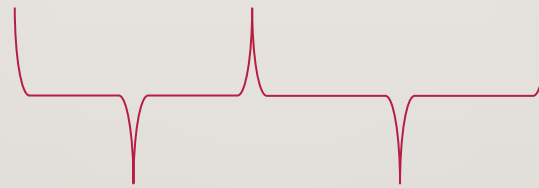
Full list of ARRL section abbreviations available at:

[http://www.arrl.org/files/file/Field-Day/2020/4\\_35-2020%20Section%20List.pdf](http://www.arrl.org/files/file/Field-Day/2020/4_35-2020%20Section%20List.pdf)

# THE FIELD DAY EXCHANGE

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4A



Transmitters Classification

# FIELD DAY CLASSIFICATIONS

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## Class A

- Club or non-club portable stations
- Minimum of 3 participants
- Operate on emergency power
- “[S]tations must be located in places that are not regular station locations and must not use facilities installed for permanent station use, or use any structure installed permanently for Field Day.”

# A NOTE ABOUT POWER SOURCES

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- Every FD classification specifies the type of power source that can be used.
- What MUST be powered using that power source?
  - Receivers/Transmitters/Transceivers and any other equipment required to operate them
  - Any batteries must be charged by the specified power source
- What does NOT need to be powered using that power source?
  - Logging computer
  - Light sources
  - Air conditioning unit
  - Coffee maker
  - Refrigerator
  - Water pump

# FIELD DAY CLASSIFICATIONS

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## **B Station**

- An A Station with only 1-2 people

## **Regular B Station**

- Uses any power source other than a non-commercial main
- No power limitations

## **B-Battery Station**

- Uses any power source other than a commercial main or motor-driven generator
- Limited to 5W



# FIELD DAY CLASSIFICATIONS

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## Class C

- Stations based in “vehicles capable of operating while in motion and normally operated in this manner”
- Includes stations on boats and airplanes
- Power source is considered to be a motor-driven generator (important for multipliers and bonus points, more on that later)
- Your “Section” is whatever section you are currently in. If you cross lines into another section, your exchange will change, too.

# FIELD DAY CLASSIFICATIONS

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## Home Stations – Classes D & E

- “Stations operating from permanent or licensed station locations”

### Class D

- Operates on commercial power
- CLASS D STATIONS CANNOT GET POINTS FOR CONTACTING OTHER CLASS D STATIONS

### Class E

- Operates on emergency power
- CAN GET POINTS FOR WORKING ANY OTHER FIELD DAY STATION

# FIELD DAY CLASSIFICATIONS

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## **Class F**

- Station based at an activated emergency operations center (EOC)
- Can run on any type of power, but must test an emergency power source at some point during Field Day

	Type of Station	# of Participants	Power Source	TX Power	Other Notes
Class A	Club or non-club	3 or more	Non-commercial	Any	Station “set up specifically for Field Day.” Cannot use any permanent facilities or structures built specifically for Field Day.
Class B	Portable	1-2	Non-Commercial	Any	
Class B-Battery	Portable	1-2	Anything other than commercial or motor-driven generators	5W	
Class C	Mobile	Vehicle’s capacity	Motor-driven generator (even if radio is connected to the battery)	Any	
Class D	Home	Any	Commercial	Any	Cannot get QSO points for contacting other Class D stations
Class E	Home	Any	Non-commercial	Any	
Class F	EOC	Any	Any, though an emergency power source must be tested at some point	Any	

# MISCELLANEOUS RULES

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**A person cannot QSO a station with which they participated.**

- Ex: Dad comes over, helps me set up my FD antenna in my back yard and test my equipment. Dad can go home and operate his station, but if he QSOs me, we cannot get points.

# MISCELLANEOUS RULES

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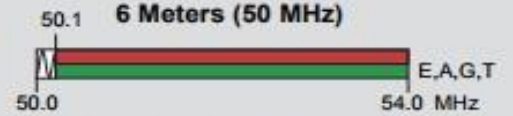
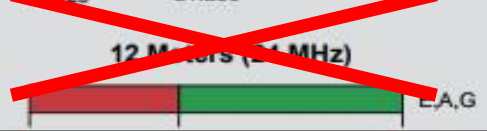
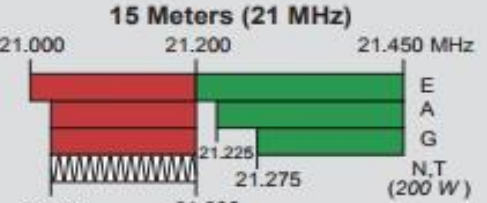
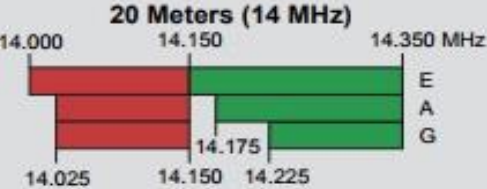
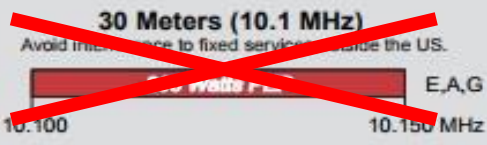
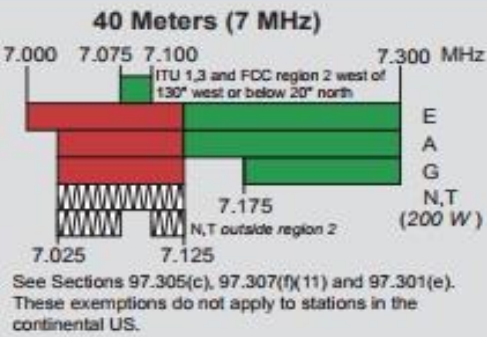
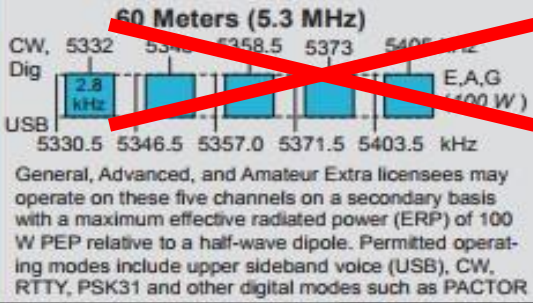
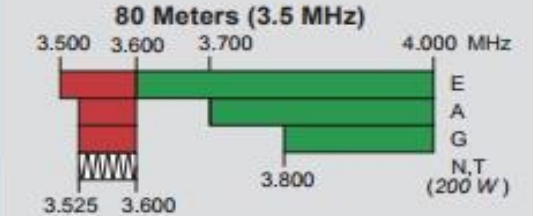
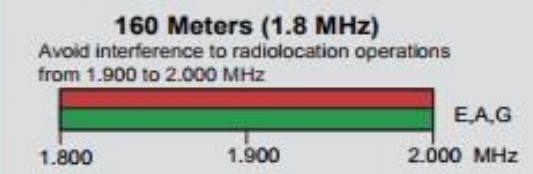
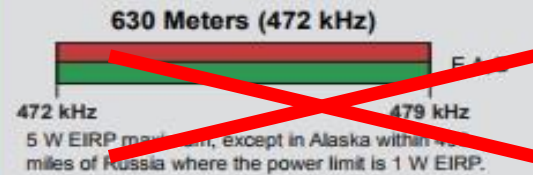
- 3 Field Day modes: Phone, CW and Digital (non-CW) modes.
- 12 bands available for FD: 160m, 80m, 40m, 20m, 15m, 10m, 6m, 2m, 1.25m, 70 cm, 33cm, and 23cm
- You are allowed to contact any station once on every mode and every band.
- So, theoretically, you can QSO the same station 12 times on voice, 12 more times on CW, and 12 more times on digital, for 36 total QSOs (good luck)
- Note: Digital is ONE mode; if you work someone on PSK63 on 20m, you cannot work that same station on 20m by switching to FT8.

# US Amateur Radio Bands

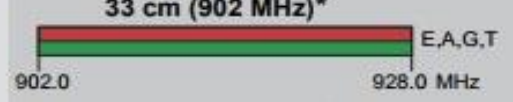
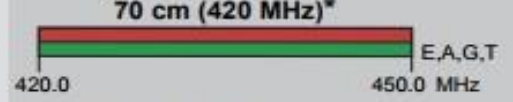
## US AMATEUR POWER LIMITS

FCC 97.313 An amateur station must use the minimum transmitter power necessary to carry out the desired communications.  
 (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

Amateurs wishing to operate on either 2,200 or 630 meters must first register with the Utilities Technology Council online at <https://utc.org/plc-database-amateur-notification-process/>. You need only register once for each band.



\*Geographical and power restrictions may apply to all bands above 420 MHz. See *The ARRL Operating Manual* for information about your area.



All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	10.0-10.5 GHz ±	122.25-123.0 GHz
2390-2450 MHz	24.0-24.25 GHz	134-141 GHz
3300-3500 MHz	47.0-47.2 GHz	241-250 GHz
5650-5925 MHz	76.0-81.0 GHz	All above 275 GHz



**ARRL** The national association for AMATEUR RADIO

### KEY

- Note:**  
 CW operation is permitted throughout all amateur bands.  
 MCW is authorized above 50.1 MHz, except for 144.0-144.1 and 219-220 MHz.  
 Test transmissions are authorized above 51 MHz, except for 219-220 MHz
- = RTTY and data
  - = phone and image
  - = CW only
  - = SSB phone
  - = USB phone, CW, RTTY, and data
  - = Fixed digital message forwarding systems only
- E = Amateur Extra  
 A = Advanced  
 G = General  
 T = Technician  
 N = Novice

See *ARRLWeb* at [www.arrl.org](http://www.arrl.org) for detailed band plans.

## ARRL We're At Your Service

- ARRL Headquarters:  
 860-594-0200 (Fax 860-594-0259)  
 email: [hq@arrl.org](mailto:hq@arrl.org)
- Publication Orders:  
[www.arrl.org/shop](http://www.arrl.org/shop)  
 Toll-Free 1-888-277-5289 (860-594-0355)  
 email: [orders@arrl.org](mailto:orders@arrl.org)
- Membership/Circulation Desk:  
[www.arrl.org/membership](http://www.arrl.org/membership)  
 Toll-Free 1-888-277-5289 (860-594-0338)  
 email: [membership@arrl.org](mailto:membership@arrl.org)
- Getting Started in Amateur Radio:  
 Toll-Free 1-800-326-3942 (860-594-0355)  
 email: [newham@arrl.org](mailto:newham@arrl.org)
- Exams: 860-594-0300 email: [vec@arrl.org](mailto:vec@arrl.org)

# MISCELLANEOUS RULES

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- All stations for a single entry must be operated under one callsign, except for the GOTA station, which must use its own, single callsign.
  - Ex: Five neighbors who live within 1,000 yards of each other want to form a Class A station. They must decide amongst themselves which callsign to use.



# MISCELLANEOUS RULES

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**A transmitter/receiver/transceiver used to contact one or more Field Day stations may not subsequently be used under any other callsign to participate in Field Day. Family members with different call signs are exempt from this rule.**

- Ex: My transceiver goes kaput on the eve of Field Day. John suggests sharing the transceiver between us; he'll operate during the day, and I'll borrow his transceiver for my station overnight. This would violate the rule; the same transceiver would be used for two callsigns to participate in Field Day. However, if John is my Dad, we wouldn't be breaking any rules.
- Ex: A club operating as a 2A with one two transmitters on-site has a newly-licensed ham show up. The club wants to get her on the air, but also wants to get all the bonus points a new ham would normally get through a GOTA station. GOTA stations **MUST** use a call sign different from the primary station. So this club can put this YL on the air, but it can't get the points the YL would have gotten by operating a GOTA station.

# MISCELLANEOUS RULES

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- All voice contacts are equivalent
  - Get as many contacts as you can, don't worry about who they are.
  - PAC is not worth more than ENY, W1AW is not worth more than K4CNY.
  - One QSO from each of the 83 ARRL sections is worth the same as 83 QSOs with AL.
- All non-CW digital contacts are equivalent
- No repeater contacts are allowed

# MISCELLANEOUS RULES

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- Cross-band QSOs are not permitted (except for Satellite)
- The use of more than one transmitter at the same time on a single band-mode is prohibited (except for GOTA).
- No repeater contacts
- Batteries may be charged while in use, but they cannot be charged from commercial sources unless used by a D station. Stations wanting the 5x multiplier (more on that in a second) cannot be charged by commercial or motor-driven generators.

# BONUS TRANSMITTERS

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Up to 3 additional transmitters can be used on FD. QSOs on these transmitters are calculated like they are on the other stations (ex. Voice worth 1 pt. CW & digital worth 2 pts), but they do not count against the station classification.

1. GOTA – Only available to certain A and F stations
2. UHF/VHF – Only available to A stations
3. Satellite – Only available to A, B, and F stations

Ex: While operating your D station on 20m, your 2m transceiver is turned on and scanning the band. Your plan is to grab the 2m mic and make a contact if you hear any CQs. Is your station a 1D or a 2D?

Answer: A 2D. Even though you're only transmitting on one transceiver at a time, you're operating two. You can monitor 2m while operating on another band, but only if you're doing so with a RECEIVER. When you hear that CQ on 2m, then turn your HF transmitter off before returning the call.

# POINTS DON'T MATTER BUT...

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- Points – Voice QSOs count for one point each, CW and digital contacts are worth two points each

# POINTS DON'T MATTER BUT...

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- Power Multipliers:
  - Ask yourself: what was the most power you used to make a contact?
    - >150 - No power multiplier
    - >5-150 – QSO points multiplied by 2
    - 5 or less - QSO points multiplied by 5
  - Example: You've made every contact so far with 5W or less. Then you hear that illusive PAC station. You know you can't possibly break through that pile-up with 5W, so you crank it up to 200. You get the contact. By the end of Field Day, you've made 401 contacts, and that PAC was the only contact you made on more than 5W. Your score is NOT 2,001 (400 5W QSOs x5 plus 1 200W QSO); your QSO score is a mere 401. You would have been MUCH better not to have gotten the PAC station at all.

# BONUS POINTS

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Depending on which class station you operate, you could be eligible for the following bonuses:

- 100% emergency power – 100 points per transmitter classification (so bonus transmitters don't count)
  - ALL contacts must be made on emergency power to qualify for the bonus.
- Sending out a press release – 100 bonus points (Note: Media doesn't have to show up)
  - Pro tip: [http://www.arrl.org/files/file/Field-Day/2020/3\\_4a-2020%20New%20Field%20Day%20PR%20Kit.pdf](http://www.arrl.org/files/file/Field-Day/2020/3_4a-2020%20New%20Field%20Day%20PR%20Kit.pdf) contains lots of resources and suggestions, including fill-in-the-blank press/media releases.
- Operating in a public location – 100 bonus points (Note: many places typically considered “Open to the public” may be closed to the public on Field Day due to Coronavirus concerns)
- Public Information Table – 100 points

# BONUS POINTS

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Depending on which class station you operate, you could be eligible for the following bonuses:

- Public Information Table – 100 points
  - For visitors to sign in and receive pamphlets and other resources about amateur radio
- Message Origination to Section Manager
  - Must include the name of your club/group, number of participants, Field Day location, number of ARES operators; and it must be written on a standard ARRL radiogram.
- Message Handling – 10 points each, 100-point max
  - Does not include message to Section Manager



# BONUS POINTS

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Depending on which class station you operate, you could be eligible for the following bonuses:

- Satellite QSO – 100 points (Note, you only need one QSO to get the bonus, but every QSO you make on Satellite after that counts towards your total QSOs)
- Alternate Power – 100 points
  - For those who make 5 QSOs without using commercial power or a motor-driven generator
  - Note: your natural power transmitter will count against your operating category unless you turn another transmitter off while making those 5 QSOs.

# A NOTE ABOUT SATELLITES

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The rules for making Satellite QSOs are a little different than normal QSOs:

- Instead of being limited to one QSO/station/band/mode, you can get one QSO per station per satellite.
  - Ex: If you work a station on an AO-7 pass, you cannot work that station again on a subsequent AO-7 pass. However, you CAN work that station again on WX-2A.
- If you're lucky enough to work an astronaut on the ISS, while impressive, it will NOT count as a satellite QSO.
- Satellites are the only exception to the "no cross-band QSO" rule
- For more information about satellites, including operating frequencies and projected pass times, visit [www.amsat.org](http://www.amsat.org)

# BONUS POINTS

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Depending on which class station you operate, you could be eligible for the following bonuses:

- W1AW Bulletin – 100 points
  - W1AW will transmit a special Field Day message 17 times, beginning at 7:00PM (CDT) on Friday. You must accurately copy this message and submit what you copied with your score sheet.
  - A list of TX times and frequencies are available at [http://www.arrl.org/files/file/Field-Day/2020/4\\_37-2020%20W1AW%20Sked.pdf](http://www.arrl.org/files/file/Field-Day/2020/4_37-2020%20W1AW%20Sked.pdf)
- Educational Activity – 100 points
  - Must be a formal, structured, program; must be more than a mere demonstration, and include some sort of interaction with learners.
  - Only available to Class A and F; or Classes D&E if there are more than 3 participants

# BONUS POINTS

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Depending on which class station you operate, you could be eligible for the following bonuses:

- Site visitation by an elected government official – 100 points
  - Have the elected official sign a log as proof
- Site visitation by a representative of an agency served by ARES – 100 points
  - Includes Red Cross, Salvation Army, local EMA, law enforcement, etc.
- GOTA Bonus – 20 bonus points for every 20 QSOs, max 100/person, 500/station
- Web submission – 50 points
  - Submit your scores by going to <https://field-day.arrl.org/fdentry.php> and following the prompts.

# BONUS POINTS

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Depending on which class station you operate, you could be eligible for the following bonuses:

- Youth participation – 20 points/person, 100 points max
  - Applies to any participant under the age of 18; bonus is earned when the participant makes 1 QSO.
  - Note: This is NOT an exception to the 2-participant max rule for Class B stations.
- Social Media – 100 points
  - Applies to any group who promotes FD on Facebook, Instagram, Twitter, etc. to encourage visitors. Although not required, ARRL requests that your post include #ARRFD
- Safety Officer Bonus – 100 points

Bonus Point opportunities	A	B	B-Batt	C	D	E	F
100% Emergency Power – 100 pts per transmitter classification, 2,000 pt. max.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Media Publicity – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public location – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>
Public information table – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>
Message origination to Section Manager – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Message handling – 10pts each, 100 points max	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Satellite QSO – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>
Alternate Power – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
W1AW Bulletin – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Educational Activity (D and E only eligible if more than 3 participants) – 100 pts	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Site visitation by an elected government official – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Site Visitation by a representative of an agency – 100 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GOTA Bonus – 20 pts per 20 QSOs, 100 max/person, 500 max/station	<input type="checkbox"/>						<input type="checkbox"/>
Web Submission – 50 pts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Youth Participation – 20 pts each, 100 max	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Media – 100 points (if you're a group that welcomes visitors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety Officer – 100 points	<input type="checkbox"/>						

# SOME PRACTICAL POINTERS

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- Go to [www.arrl.org/field-day](http://www.arrl.org/field-day) for rules and other resources. Also be sure to review the general rules for all ARRL contests (link at end)
- To save time tabulating your QSO points and minimizing your dupes, use your computer to log. There's some great software out there, but their servers tend to get overloaded on the eve of Field Day. Get the software you need now and start getting familiar with the features.
  - HARC uses N1MM for Field Day. It's available here: <https://n1mmwp.hamdocs.com/>
- Carefully review the Field Day form well in advance of Field Day; it's a great makeshift checklist to make sure you aren't missing anything critical.

# SOME PRACTICAL POINTERS

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- Field Day traffic will fill up the bands. Exchanges are short and highly structured. So if you don't get on the air because "no one responds to my CQ" or you "don't know what to talk about," FIELD DAY IS THE DAY.
- If you have the capabilities to experiment with new modes, FIELD DAY IS THE DAY. If your signal is getting out, you will get a response more quickly than you will on any other day of the year.
- Review the list of section abbreviations. Some, like WCF (western central Florida) or GTA (greater Toronto area) may throw you off.
- You do NOT need to submit your score to participate in FD.



# WHAT ABOUT HARC?

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Objectives of a normal contest:

1. HAVE FUN!
2. Prove station capabilities
3. Inspire development of new skills
4. Provide feedback for improvement

Objectives of a normal Field Day:

1. HAVE FUN!
2. Public Engagement
3. Comradery
4. Prove station capabilities
5. Inspire development of new skills
6. Provide feedback for improvement

# WHAT ABOUT HARC?

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Objectives of this Field Day:

1. HAVE FUN!
2. Don't endanger the health of others
3. Stay healthy
4. Get on the air

Objectives of a normal Field Day:

1. HAVE FUN!
2. Public Engagement
3. Comradery
4. Prove station capabilities
5. Inspire development of new skills
6. Provide feedback for improvement

# HARC'S FIELD DAY PLAN A:

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## **Criteria:**

- All state and local social distancing orders/recommendations/guidelines have been lifted

## **Execution:**

- No major changes from last year
- Provide extra Clorox wipes and hand sanitizer, encourage participants to use them.
- Have a great Field Day!


# HARC'S FIELD DAY PLAN B:

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## **Criteria:**

- Some social distancing orders/guidelines are in place, but no severe restrictions. E.g. No social gatherings restrictions of less than 25 people

## **Execution:**

- GOTA and picnic cancelled, but food and drinks will be provided to those working FD
  - Extra organization with tower raising to ensure no more than 25 people on the Field
  - Stations limited to one person per trailer – All station observation must be done from outside the trailer
  - Voice operators strongly encouraged to bring their own microphones/headphones
  - Stations wiped down between operators
  - Sick, high-risk, or immunocompromised club members encouraged to stay home.
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# HARC'S FIELD DAY PLAN C:

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## Criteria:

- Strict social distancing orders in place (e.g. no social gatherings of 10 or more people)

## Execution:

- GOTA and picnic cancelled, workers encouraged to bring their own food/drinks
  - Antenna plan will need to be re-written to accommodate a small tower team
  - Workers required to wear masks, voice operators required to provide their own microphones
  - Staggered operator shift change times, operators discouraged from arriving too early or leaving too late
  - Operator/Station Manager availability may require dropping down to 3 or 2A
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# HARC'S FIELD DAY PLAN D:

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## Criteria:

- Stay-at-home order in place
- Any other plan's criteria + vote of the club

## Execution:

- HARC does not participate in Field Day this year
- Members strongly encouraged to operate on their own as a B, C, D, or E station

ONE FINAL NOTE

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**HAVE FUN**

# ADDITIONAL RESOURCES

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<http://www.ARRL.org/Field-Day> - Great resources including a rules packet, FAQs, reference sheets, score sheets, etc.

<http://www.arrl.org/general-rules-for-all-arrl-contests> – General rules for all ARRL contests; these rules supplement FD rules.

<https://www.facebook.com/groups/arrlfd/> - Includes lively debate and ideas for having the best Field Day possible

<http://groups.arrl.org>, then join the “contesting” group for Q&A with ARRL staff (be sure to edit your e-mail settings unless you’re okay with getting an e-mail every half hour or so)

