

ARRL Field Day 2020

Updated 6/20/2020

C.A.R.E.S. Operation

June 27, 2020



Agenda

- What is Field Day?
- **Promotions**
- CARES Field Day A Time To Adapt

- **CARES Field Day Plan**
- **Operational Schedule**
- Volunteers

What is Field Day?

- An annual ARRL sponsored 24-hour event held on the forth full weekend of June
- Field Day Objectives
 - To setup communication operations "under abnormal situations in less than optimal conditions."
 - To work as many stations as possible
 - Demonstrate to the public what amateur radio service is about and how it can serve them in times of crisis and disasters
 - Public showing of how CARES prepares and serves our community



CARES Field Day Promotion

- Cupertino Scene
- Cupertino.org Event Calendar
- Cupertino AM Radio 1670KHz
- Invitations have been sent to:
 - Mayor Steven Scharf and Cupertino City Council
- ARRL Section Manager and Vice Director

- Brandon Bianchi (NI6C) ARRL Section Manager
- Kristen McIntyre (K6WX) ARRL Vice Director

- COVID-19 has changed nearly every aspect of life as we know it
 - Social Distancing of six feet or greater
 - Small group gatherings of no more than 10 people
 - No station coaches including GOTA
 - No public setup or public displays
- Even if Shelter-In-Place is lifted, the above restrictions will still be in place

A quote from an ARRL Field Day article:

"With any emergency preparedness exercise, it's not about adapting the situation to your operation, it's about adapting your operation to the situation that presents itself."

Therefore, this year's Field Day objectives are:

- For all participating CARES members to have fun
- Keep people from getting sick
- Adapt our operations to the current situation

- Today, Cupertino EOC is activated for COVID-19 at level 3 (situation monitoring) with no one physically present at any city EOC facility but is being conducted virtually
- Therefore, CARES will operate a virtual Field Day to parallel a virtual EOC operation
 - No physical setup
 - No GOTA station
 - No city activation number required
 - Sadly, no lunch or drinks will be provided
- All clubs and groups are working out how they will operate on Field Day



Recent changes for Field Day 2020:

- Two Field Day rule waivers or variances published on May 27, 2020 driven by the COVID-19 Pandemic
 - 1) For Field Day 2020 only, Class D stations may work all other Field Day stations, including other Class D stations, for points.
 - 2) In addition, for 2020 only, an aggregate club score will be published, which will be the sum of all individual entries indicating a specific club (similar to the aggregate score totals used in ARRL affiliated club competitions).

http://www.arrl.org/temporary-rule-waivers-for-arrl-field-day-2020



How do the two rules affect CARES Field Day?

- The first rule allows any home station operating as class D (home station) to work all Field Day stations including other class D stations home stations
- In previous years, class D stations could work class A, B, C, E and F but not any class D stations
- This allows for more contacts to be made

How do the two rules affect CARES Field Day?

- The second rule effectively removes the 1,000 foot diameter circle requirement, but...
 - Each participant operates from home, mobile, etc. and uses their own call sign
 - Each participant will assume their own class and section
 - Each participant logs their own contacts
 - Each participant submits their own Field Day entry using the Field Day web submission form:
 - https://field-day.arrl.org/fdentry.php
 - Each enter "CUPERTINO ARES" on the form labeled "Club or group name"

ARRL Class

- Class A: Club or Group of 3 or more persons
- Class B: No more than two persons typically running on battery power or non-commercial power
- Class C: Mobile -- vehicle, marine, aeronautical
- Class D: Home station running on commercial main power
- Class E: Home station running on emergency power
- Class F: Emergency Operation Center (EOC) CARES operates in this class
- The number preceding the class designator is the number of transmitters simultaneously operating
 - Eg: 2F = 2 transmitters operating in class F
 - Eg: 1E = 1 transmitter operating in class Eupertino ARES/RACES



ARRL Section / RAC section

- ARRL / RAC section is an abbreviation of the ARRL section you are operating from
 - RAC: Radio Amateur of Canada
- ARRL Section Region 6 in San Francisco Bay Area:
 - SF: San Francisco
 - EB: East Bay
 - SCV: Santa Clara Valley
- All ARRL / RAC sections can be found in the ARRL Field Day 2020 packet (in PDF)



What bands can be used for Field Day?

- All work bands
 - Includes: 160m, 80m, 40m, 20m, 15m, 10m, 6m, 2m 220, 440
 - Excludes: 60m, 30m, 17m and 12m
- Modes:
 - Digital
 - CW, PSK31, RTTY, FT8, FT4, Packet
 - Non-Digital
 - SSB phone, FM Voice

What types of contacts do NOT count for Field Day?

- Any contacts made using repeaters
 - No contacts via FM repeaters, IRLP, Echolink, DMR
- Contacts made via Satellite are exempt

Field Day has arrived, you need to:

- Decide what class you will operate as and the number of transmitters, once you start you cannot change it
 - Example: 1D Home station commercial power ("one delta")
 - Example: 1E Home station emergency power ("one echo")
- Your ARRL section will most likely be SCV Santa Clara Valley
- Your exchange will then be:
 - Your callsign, Class, Section
 - Example: KI6LDM, 1E (One Echo, Sierra Charley Victor)
- REMEMBER: Class D stations can work all Field Day classes including other class D stations per the first rule waiver



Field Day Exchange Example for Voice

KI6LDM> CQ Field Day, CQ Field Day, Kilo India Six Lima Delta Mike, QRZed:

KN6PE> Kilo November Six Papa Echo

KI6LDM> Kilo November Six Papa Echo, One Echo, Sierra Charley Victor

KN6PE> Kilo India Six Lima Delta Mike, One Delta, Sierra Charley Victor (KN6PE repeats Kl6LDM, but its not required)

KI6LDM> CQ Field Day, CQ Field Day, Kilo India Six Lima Delta Mike, QRZed:

KK6EWQ> Kilo Kilo Six Echo Whisky Quebec

KI6LDM> Kilo Kilo Six Echo Whisky Quebec, One Echo, Sierra Charley Victor

KK6EWQ> One Charley, Sierra Charley Victor (KK6EWQ doesn't say Kl6LDM, its not required, Kl6LDM moves on.)

KI6LDM> Thanks, CQ Field Day, CQ Field Day, Kilo India Six Lima Delta Mike, QRZed:

You will often hear "Please copy...class section"

Use of phonetics are very important especially on HF SSB



What if I only have a 2m/440 HT?

- Field Day is for every ham that wants to participate and we encourage you to join in on the fun!!
- Your exchange will be 1B SCV
- Its expected that there will be a lot more 2m/440 participants this year AND you can claim the 5X power multiplier for operating 5 watts or less from your HT
- Use the 2m simplex frequencies: 146.460, 146.505,146.520, 146.535 to make contacts. National calling frequency: 146.52
 - See http://www.portcars.org/wp/wp-content/uploads/2011/09/2-Meter-BandPlan.pdf
- Use the 440 band as well
- Just don't use any repeaters for making Field Day contacts
- Don't forget to log your contacts



HF band Plan depending on propagation

Time PDT	Band	Mode	Remarks
1100	20m	CW, FT8,SSB	
1200	20m	CW, FT8,SSB	
1300	20m	CW, FT8,SSB	Check both 15m and 10m, look for FT8 signals
1400	20m	CW, FT8,SSB	Check 15m
1500	20m	CW, FT8,SSB	Try the "take a nap band", there might be good precogitation
1600	20m	CW, FT8,SSB	Check 40m, also 10m has been known to have short openings
1700	20m	CW, FT8,SSB	Check 40m
1800 - 2000	20m,40m	CW, FT8,SSB	Check 80m
2000 - 2300	20m,40m,80m	CW, FT8,SSB	20m usually dies at this point
2300 - 0600	40m,80m	CW, FT8,SSB	40m and 80m should be strong, or try the "Go to sleep" band
0600	20m, 40m	CW, FT8,SSB	
0700	20m,40m	CW, FT8,SSB	80m will start to die
0800	20m,40m	CW, FT8,SSB	
0900	20m	CW, FT8,SSB	Check 15m and 10m
1000	20m	CW, FT8,SSB	
1100			GAME OVER

Digital Modes

- CW, PKS31, RTTY, FT8, FT4
- Digital contacts are worth 2 points each
- The most popular digital mode for this year's Field Day will be FT8 and FT4
 - Requires WSJT-X version 2.1.2 for Windows 10 and Linux
 - Has a built-in logging feature
 - Can be used on HF, 6m, 2m
 - For Field Day operations, configure WSJT-X for Field Day and enter your class and section
 - File -> Settings -> Advance, check the box for Special operating activity, then select ARRL Field Day, then enter your class and ARRL/RAC section i.e., 1E_SCV_ARES/RACES

Logging for Field Day

- There are a number of logging programs
 - N1MM Free
 - WriteLog \$30.00
 - N3FJP \$9.00
 - Microsoft Excel can also be used to log contacts
- It is not required to submit cabrillo or ADIF logs for Field Day
- You do not need to have an account on Logbook of the World
- Log your contacts in whatever way works best for you
- WSJT-X has a built in logging feature
- After Field Day, sort your contacts by band and mode



Logging for Field Day

- Required information to log
 - Band the contact was made on (or frequency)
 - Date
 - Time (UTC)
 - Mode i.e., CW, LSB / USB, FM, PSK31, FT8, FT4
 - Station worked call sign
 - Exchange received: Class I,e., 1D OR, 2B AB, 1E STX
- Most logging programs provide a Field Day specific logging feature



51									
	20m @100w	Mode=USB							
53									
		Date	Time (UTC)		Class	Section	Youth	Comments	
55 [14.3400	6/22/2019		KU6S	4A	EB			
56	14.3450	6/22/2019		K5SSR	1A	NM			
57	14.3450	6/22/2019		K70JI	2A	ID			
58 [14.3450	6/22/2019		K70PP	1A	EWA			
59	14.3450	6/22/2019		KC7PCL	1D	NM			
60	14.3450	6/22/2019			9A	SCV			
61	14.3450	6/22/2019		K7BWJ	1D	NV			
62	14.2580	6/22/2019		W70XB	1D	WWA			
63	14.2710	6/22/2019		W7BI	ЗА	WWA			
64	14.3470	6/22/2019		N7UW	2A	WY			
65	14.2875	6/22/2019		K7WA	ЗА	UT			
66	14.2500	6/22/2019		K7DAV	ЗА	UT			
67	14.2960	6/22/2019		K7CAR	1B	UT			
68	14.8425	6/22/2019		W7MOT	2A	AZ			
69	14.2575	6/22/2019		VE6A0	1D	AB			
70	14.2360	6/22/2019		N7W	2A	WY			
71	14.2780	6/22/2019		WODK	ЗА	co			
72	14.2800	6/22/2019		W5NOR	3F	OK			
73	14.2380	6/22/2019			4A	AZ			
74	14.3030	6/22/2019	21:10	W6YX	2F	SCV			
75	14.2590	6/22/2019		VE7PCE	2A	BC			
76	14.1930	6/22/2019		AK7RM	1D	AZ			
77	14.2165	6/22/2019		W0BX	1E	co			
78	14.2800	6/22/2019		W1DGL	1B	AZ			
79	14.3070	6/22/2019		W6SJC	2A	SCV			
80	14.2379	6/22/2019		W7SP	ЗА	UT			
81	14.1995	6/22/2019		W7XP	1A	UT			
82	14.3300	6/22/2019		NM5HD	2A	NM			
83	14.3380	6/23/2019		K0PRA	2A	co			
84	14.2570	6/23/2019		N6IPD	2A	ORG			
85	14.2230	6/23/2019		W6TOI	ЗА	LAX			
86	14.9960	6/23/2019		K7BNR	6A	ID			
87	14.2740	6/23/2019		W5WX	5A	WTX			
88	14.2890	6/23/2019	0:08	K0RV	3A	co			
89									
90									
91	Total	34							

a	А	В	С	D	Е	F	G	н	1 1
1						I.	0		
2	Club Call Sign	K6KP							
3	oldb odil olgii	10010							
4	15m @100w	Mode=FT8		All FT8 QSOs	made on battery	nower			
5						P = = .			
6		1							
7	Frequency (MHz	Date	Time (UTC)	Club Call Sig	Club Category	Club Section	Call Sign Worked	Class	Section
8	21075.00	6/22/2019		K6KP	3F	SCV	N6H	3A	EB
9	21074.00	6/22/2019	1927	K6KP	3F	scv	KK7ER	1D	OR
10	21075.00	6/22/2019	2009	K6KP	3F	SCV	KOPRA	2A	co
11	21075.00	6/22/2019	2013	K6KP	3F	SCV	KOPRA	2A	co
12	21076.00	6/22/2019	2016	K6KP	3F	SCV	KD5C	3A	WTX
13	21074.00	6/22/2019	2051	K6KP	3F	SCV	N4TUR	1D	SFL
14	21075.00	6/22/2019	2100	K6KP	3F	SCV	AA7V	1D	AZ
15	21075.00	6/22/2019	2105	K6KP	3F	SCV	K6EI	9A	SCV
16	21074.00	6/22/2019	2109	K6KP	3F	SCV	KOPRA	2A	co
17	21074.00	6/22/2019	2114	K6KP	3F	SCV	WX7XX	2A	ID
18	21075.00	6/22/2019	2122	K6KP	3F	SCV	WT5ARC	2F	WTX
19	21075.00			K6KP	3F	SCV	W7YS	3A	AZ
20	21075.00			K6KP	3F	SCV	WT5ARC	2F	WTX
21	21075.00	6/22/2019		K6KP	3F	SCV	KN5S	2D	STX
22	21075.00			K6KP	3F	SCV	KN5S	2D	STX
23	21075.00			K6KP	3F	SCV	K7K	4A	AZ
24	21075.00	6/22/2019		K6KP	3F	SCV	W6CUS	2A	EB
25	21075.00	6/22/2019	2154	K6KP	3F	SCV	AK7AT	2E	ID
26									
27									
	Total	18							
29									

Field Day 2020 is over, time to submit your entry

- Collect any supporting documents to support any claimed bonus points
- 2. Total up your contacts by band and by mode
- 3. Package up your logs (hopefully they are on your computer)
- 4. Go to https://field-day.arrl.org/fdentry.php
- Enter YOUR call sign, your location in the ARRL/RAC section drop-down list
- 6. On the form "Club or group name", enter "CUPERTINO ARES"
- 7. Enter the number of participants and simultaneous transmitters
- 8. Check the class you operated as: B, C, D, or E
- 9. Check the Power Sources, all that apply



06/04/2020

Field Day 2020 is over, time to submit your entry

- 9. For bonus points, only check the ones you did i.e., copy the W1AW bulletin and attach any supporting documents/files
- 10. Enter your QSO counts by band and mode per the table in the form
- 11. Do not enter anything for GOTA
- 12. Double check your information
- 13. Provide your name, call sign and email to confirm
- 14. If all is correct, click Submit Entry
- 15. Add any further comments as you wish
- 16. You will receive an email with your total score and breakdown. The email will contain a link for making changes if necessary.

Entries must be submitted with in 30 days of Field Day RACES

← → C						
2020 Field Day Entry						
Attention! Entries for the 2020 Field Day are not being accepted until its start at 2020-06-27 18:00:00						
Complete this form to submit your Field Day Entry to the ARRL for review and tabulation. You can access a help page by clicking on 1 next to an item on the form. Note: You can select documentation files for the documents at a later time. Each document can not be larger than 6 MB.						
Call Used GOTA Station Call Location Select ARRL/RAC section						
Club or Group Name						
Number of Participants Number of Transmitters in simultaneous operation						
Entry Class (check only one): A. Club or non-club group portable List of calls of operators: C. Mobile D. Home station commercial power E. Home station emergency power F. EOC station E. EOC station E. Home station energency power E. Home station emergency power E. Home station E. Home st						
Power Source (check all that apply): Generator Commercial mains Battery Solar Other (list)						
Power Multiplier (check only one): 5 watts or less and battery powered = 5x 150 watts or less = 2x Over 150 watts = 1x						

Media publicity	Upload documentation: Choose File No file chosen	
☐ Public location ()		
Public information table	Upload documentation: Choose File No file chosen	
☐ Formal message to ARRL SM/SEC()	Upload documentation: Choose File No file chosen	
W1AW Field Day message	Upload documentation: Choose File No file chosen	
□ Formal messages handled ○ No.	Upload documentation: Choose File No file chosen	
Satellite QSO (automatically determined)		
☐ Natural power QSOs completed []	Upload documentation: Choose File No file chosen	
Site visit by invited elected official		
☐ Site visit by invited served agency official i		
☐ Educational activity ()		
☐ Youth participation []		
Number of youth participants completing at least 1 QSO:		
Total number of youth participants:		
GOTA bonus (automatically determined)		
Submitted entry online (automatically determined)		
Safety officer	Upload documentation: Choose File No file chosen	
□ Social media		

Band/Mode QSO Breakdown: Do not list GOTA QSOs in this section.

		W	Diç	gital	Ph	one	Upload band/mode calls list (Dupe Sheet or Cabrillo file): Choose File No file chosen
Band	QSOs	Pwr(W)	QSOs	Pwr(W)	QSOs	Pwr(W)	
160m							
80m							
40m							
20m							
15m							
10m							
6m							
2m							
222							
432							
Other							
Satellite							

I/We have observed all competition rules as well as all regulations for amateur radio in my/our country. My/our report is correct and true to the best of my/our knowledge. I/We agree to be bound by the decisions of the ARRL Awards Committee. Submission of this form indicates my/our agreement with these statements.

Name Call E-mail Address

You'll have an opportunity to enter comments using a link on the confirmation page.

Submit Entry Clear Form

Cupertino ARES/RACES

CARES Field Day Schedule

- 10:00 11:00 Field Day Operation briefing via W6TDM or Zoom
 - Take CARES check-ins, open net
 - Record participants Field Day class and section
 - Answer any questions
 - Make any last minute adjustments

- 11:00 (1800 Zulu) ARRL Field Day radio operations begins
- Since there is no tear down required, we can run until we are tired of operating



CARES Field Day Operations

- Operate our radios and log contacts
- Media Interviews
 - Press and other media organizations
- Visits by Cupertino elected officials and served agencies via Zoom
- Visit by ARRL section leaders via Zoom or W6TDM
 - Brandon NI6C ARRL Section Manager
 - Kristen K6WX ARRL Vice Director Western Division
- Photos by participants for ARRL Submission
- Enjoy the day, stay safe, stay cool and have fun!



CARES Field Day Needs

- Volunteer needed to moderate and manage Zoom conference
- Listen for and copy down W1AW bulletin (K6PH will broadcast the W1AW bulletin for the West Coast)
- Station operators
- Send NTS packet message to section manager

Some Final Comments

- All FCC Part 97 rules apply during Field Day
- Operate with in your license class band privileges
- If there is an active hurricane, please stay clear of 14.300MHz and 14.325MHz
- We can help you with submitting your Field Day entry as needed

Interested in Getting Your Amateur Radio License?

The following are links to several VE and test locations for obtaining your amateur radio (ham) licenses:

Name / Location	Website
Sunnyvale VEC ARC	www.amateur-radio.org/
BAEARS - Bay Area Educational Amateur Radio Society	www.baears.com/
Silicon Valley VE Group – Saratoga Fire Station	www.svve.org/
W5YI-VEC	www.w5yi.org

Additional information can be found at:

Ham Radio Outlet 2210 Livingston S Oakland, CA 94606 (510) 534-5757 The ARRL
Amateur Radio Relay League
www.arrl.org
Search for VEC:
www.arrl.org/find-an-amateur-radio-license-exam-session

Thank you Any Questions?

