

ARRL FIELD DAY SIMPLIFIED

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Field Day Simplified

- Purpose of Field Day
- Basic Rules
- The Contact Exchange
- Scoring
- Station Setup
- Strategies





Field Day Purpose

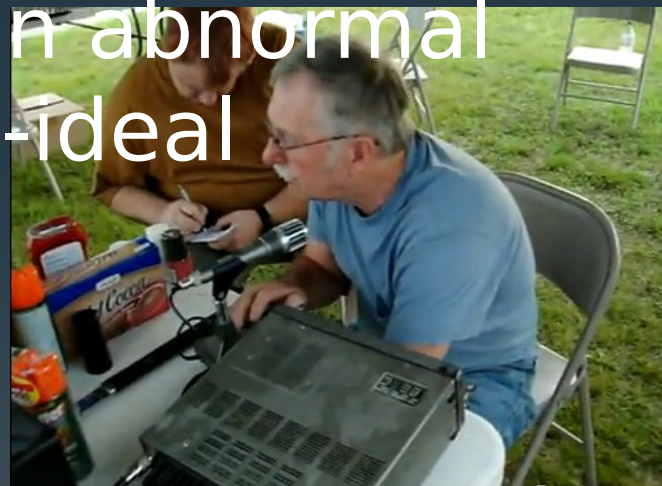
- Social gathering
 - Eating and drinking
 - Camaraderie and friendship
 - Camping
 - Weekend “getaway”
- Emergency Preparedness
 - Training ourselves
 - Demonstrate emergency preparedness to public, government and served agencies
 - Experimentation with antennas, portable equipment and unusual power sources





Field Day Purpose (cont.)

- Chance to try out new/different equipment
- Knowledge building
- Recruiting new hams and potential members
- Challenge of operating in abnormal situations and less-than-ideal conditions
- Competition
- FOOD AND FUN!





Objective of Field Day

- To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands – no repeaters) and to learn to operate in abnormal situations, in less than optimal conditions.
- Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations, and countries within IARU Region 2
- DX stations residing in other regions may be contacted for credit, but are not eligible to submit entries.



Motivation

- Many hams profess no interest in operating radio on Field Day, but in reality they're reluctant to participate because of:
 - “Mike Fright” (or “Key Fright”)
 - Unfamiliar with radio procedures in general
 - No experience on HF (but ham radio is *more* than 2 meter repeaters)
 - “Don't like contests”



So...

- What's your excuse?
 - You don't have to be a "super-ham" to operate Field Day
 - We're here to help you out. Don't be hesitant to ask.
 - You can "play" as little or as much you'd like



WHO CAN OPERATE FIELD DAY?

- ANYONE
 - LICENCED HAMS CAN OPERATE ON THEIR OWN UNDER THE NORMAL RESTRICTIONS OF THEIR LICENSE, OR ON UNDER THE PERMISSIONS OF A CONTROL OPERATOR
 - NEWLY-LICENSED OR NON-LICENSED PEOPLE ARE ENCOURAGE TO OPERATE THE GOTA STATION





What are we trying to accomplish?

- Contact as many other stations as possible
- On any and all amateur bands (excluding the 60, 30, 17, and 12 meter bands)
- And in doing so, to learn to operate in abnormal situations in less than optimal conditions.
- A premium is placed on:
 - developing skills to meet the challenges of emergency preparedness
 - acquainting the general public with the capabilities of Amateur Radio



Field Day Entry Categories

- Are based on:
 - Number of transmitters
 - Total number of transmitters operating on Voice (SSB, AM, FM), CW (Morse Code) and Digital Modes
 - The Get On The Air (GOTA) station, along with a VHF/UHF station, do not count toward this number
 - Where the Station is located
 - In the “field”, at home, at an EOC, mobile, etc.
 - How Transmitters are powered
 - Emergency Power (Generators), Batteries, Solar, etc.



OUR OPERATION

- We generally set up on Saturday morning, go through the night and then break down sometime on Sunday around noon.
- New rules allow stations to start set-up as early as 0000Z Friday (8 PM Local Thursday), as long as we do not operate more than 24 hrs. of the 27.
- Set up will begin Friday, June 27, at 2 PM
- In the past we've operated two or three HF stations (2A/3A), plus a Get On The Air (GOTA) station for those with less radio experience
- This year our goal is to operate 5A with a GOTA station and also operate a separate UHF/VHF station, as well as trying to make satellite contacts for bonus points



OUR OPERATION

- We operate primarily on generators. The GOTA and VHF/UHF station can be powered by any means.
- We should also look at using alternative energy sources (solar, for example) and make at least 5 contacts with that for bonus points.



WHERE?



Poland Spring Resort



LOCATION, LOCATION, LOCATION

- Why at Poland Spring Resort?
 - Location
 - Easy access
 - Plenty of room and facilities
 - 680-700' elevation
 - Public Access
 - Poland Spring Heritage Days and Strawberry Festival (1,200 visitors last year) Did I mention strawberries?
 - More people = more potential GOTA operators/new hams/ new members
 - Poland Spring Resort owner & Festival committee want us there



THE BASIC RULES OF FIELD DAY

- No new rules for 2014
- All transmitters must be within a 1000 foot circle
- All transmitters must use the same call – we're currently exploring getting a 1x1 vanity call.
- Except for the GOTA station which will use a separate call, usually that of the GOTA primary control operator



MORE RULES

- No contact between a FD station and individual participant of that station
- Radios cannot be used for more than one call sign during FD period (GOTA separate radio)
- Phone, CW, and Digital are considered separate “bands”
- All voice contacts (SSB, FM, AM, satellite) are equivalent (1 point each)



MORE RULES (continued)

- All CW and digital contacts (PSK31, RTTY, Packet, Pactor, etc.) are equivalent (2 points each)
- No cross--band contacts (exc. Satellite)
- Only one xmtr per “band” at any time (exc. GOTA)
- No contacts on repeaters or on 146.520 simplex



CONTACTS

- Can only work each station once per band-mode:
 - For example, you can work the same station once on 20M phone, once on 20M CW, and once on 20M digital mode (total 5 points)
 - You can work the same station on other frequency bands and modes for additional points.



The Contact “Exchange”

- In order to make a valid contact, the information to be exchanged consists of:
 - Number of transmitters at your site (3 for example)
 - Class of operation (A most commonly, F from EOC)
 - ARRL Section, State, Province or Part of State (ME for us)
- So, for us:
 - On CW – “3A ME” or “2A ME” or “2F ME”, etc.
 - On Phone – “Three Alpha Mike Echo”



Exchange must be accurate

- You must copy the information correctly from the other station AND...
- The other station must copy your information correctly, OR ELSE...
- It is not a valid contact and will be deducted from our final score



ARRL Section

- 71 US and 12 Canadian Sections
- Basically each US state (PR and US VI) and Canadian province
- Some states/provinces are divided into multiple sections:
 - Maine is all on section
 - Massachusetts is 2, Eastern and Western (EMA & WMA)
 - New Jersey is 2 sections, Northern and Southern
 - Texas is 3 sections
 - Ontario is now 3 sections
 - New York is 4 sections
 - California is 6, etc.



ARRL Sections (continued)

- Each section has a unique 2 or 3 letter identifier.
- Examples:
 - ME = Maine
 - EMA = Eastern Massachusetts
 - LAX = Los Angeles
 - WTX = West Texas
 - NFL = Northern Florida
- List can be found at each station and is prominent on most logging software – keeps track of worked sections and ones still needed.

BONUS POINTS

DON'T JUST STAND
AROUND – WORK ON
THOSE BONUSES!

HERE'S WHY AND
HOW:





BONUS POINTS

- 100% Emergency Power – 100 points per transmitter (except GOTA, VHF/UHF and Satellite)
 - Support equipment and peripherals (like computers, lights, etc.) can be on regular commercial power
- Media Publicity – 100 points
- Public Location – 100 points
- Originating a Message to Section Manager – 100 points (usually sent through Seagull Net 5pm on 3.940)
- Handling Messages – 10 points per, max 100 pts.
 - cannot be messages to Section Manager



BONUS POINTS

- Site Visit by an invited Elected Government Official (know one?) – 100 points
- Site Visit by Served Agency Group Rep. (Red Cross, Salvation Army, local EMA, Law Enforcement, etc.) – 100 points
- Public Information Table – 100 points
- Educational Activity (must be a “related to amateur radio” and a “formal activity”) – 100 points



BONUS POINTS

- GOTA
 - Each GOTA participant may earn 20 points for every 20 contacts up to 100 points per participant. Each participant *MUST* make at least 20 contacts to earn bonus points. There is no partial credit or pooling of contacts. No single participant can earn more than 100 points.
 - The GOTA station can earn up to 500 points. You can make as many contacts as you want but the station can only earn a max of 500 points.
 - GOTA points double for a full-time GOTA coach



BONUS POINTS

- Web Submission of Field Day entry (when sent in to the proper web sit) – 50 points
- Youth Participation – 20 points for each participant age 18 or younger who completes at least one QSO
 - Max. of 100 points

Basic Field Day Operating Strategies

- Search and Pounce (S&P)
 - You roam around the bands looking for other stations calling CQ
- Calling CQ
 - You sit on an open frequency and call CQ waiting to others to respond





Search and Pounce (S&P)

- You can be selective about who you contact
- Useful in contests where multipliers are ARRL sections, DX zones
- You can intentionally avoid stations with big pile ups (many stations calling the same station) which wastes time and reduce your “Q Rate” (number of contacts (QSOs) per minute or hour)
- You must check the log to make sure the calling station is not a “Dupe” (duplicate of earlier QSO)



Calling CQ

- You never know who will answer
- May not work as many multipliers (sections)
- Usually can work a lot more stations (more points, higher “Q Rate”)
- Can be even easier using a voice keyer (recorded voice message)
- May have to handle a pile-up (good practice for upcoming W1AW/1 operations)
- Can get tiring if you call by voice and no one answers



Example of Good Phone Exchange

- You call: CQ Field Day, CQ Field Day from W1NPP, Whisky One November Papa Papa
- Someone answers: W1NPP here is November Four Alpha Whiskey Baker
- N4AWB, please copy Three Alpha, Maine, Three Alpha Mike Echo, over
- QSL, please copy Four Alpha, South Florida, Four Alpha SFL, over
- QSL, thanks for South Florida and good luck in Field Day. QRZ from Whisky One November Papa Papa



Bad Example of Phone Exchange

- You call: CQ Field Day, CQ Field Day from W1NPP, Whisky One November Papa Papa
- Someone answers: W1NPP from November Four Alpha Whiskey Baker. Please copy Four Alpha South Florida
- N4AWB didn't give you a chance to get his call before he sent his exchange and section. You are probably still trying to type in his call and he's wasting time by giving it all at once so you need to ask him to repeat.
- Take your time and make sure you get everything right before moving on.
- Saves time and increases points.



Phonetics on Phone

- Phone operators must use the ITU Phonetics:
 - A = Alpha
 - B = Bravo
 - C = Charlie
 - D = Delta
 - Etc.
- A sheet with a complete list is also at each station

OPERATING HINTS

Some good
operating
strategies for
Phone, CW and
Digital Modes





Hints for Working Phone

- When Searching and Pouncing, enter calling station's call in software FIRST, this way you don't waste time calling a Dupe
- Use phonetics for all of the exchange. Many people think the abbreviation for Maine is MA, and not ME. Saying Mike Echo helps avoid that confusion.
- Repeat the other station's exchange to make sure you got it right. "Thanks for South Florida" only takes an extra second and can help make sure you got it right the first time.



Hints for Working Phone

- Don't call at station with a pile up more than just a few of times. This wastes time and you can always come back to them later. Chances are, if they're strong you'll hear them again and, if they're not, they won't hear you anyway.
- Don't be long winded while calling CQ. Call a few times then listen. Call again if no one responds.
- Keep your exchanges short and to the point. If you've been calling CQ, some stations will be impatient and leave before they call you if you're going on about the weather and other stuff while they're waiting.



Hints for Working Phone

- Don't be afraid to ask for repeats. If you can't hear them the first time or forget to record it, just say, "Please repeat your... (call sign, section, etc.)" If you still can't make it out, say, "Just you call, your call please" or "Just your section," etc. That sometimes makes it easier to make out without all the other stuff you don't need and saves time.
- Don't be afraid to repeat your own info if conditions are really bad. "Three Alpha Maine, Three Alpha Mike Echo..." etc. *But* don't bother to repeat if conditions are good; it will only slow you down. Repeat only if asked when the other station is strong.



Hints for CW

- Keep your calls brief:
 - A good CQ should be only: CQ FD CQ FD de W1NPP W1NPP k
 - A good reply to another station's CQ should be: *"THEIR CALL de W1NPP"*
 - *Or simply "W1NPP W1NPP"* and let him call you.
 - When he gives you a call reply, "3A ME 3A ME W1NPP"
 - Sometimes he'll call you and give his Exchange first. If so, reply, "QSL 3A ME 3A ME W1NPP"



Hints for CW

- If you call CQ and someone answers, the you should send: “*HISCALL* 3A ME 3A ME de W1OCA”
- Once he’s acknowledged and sent his Exchange, acknowledge him and move on: “QSL QRZ W1OCA”
- Just like phone, don’t be shy about asking for repeats or fills. Everyone needs them now and then. If you don’t get it right, the whole contact has been a waste of both his time and yours. You *BOTH* have to get it right for it to count.



Hints for CW

- Don't be afraid to call a station who's going faster than you can comfortably copy. Most of the time he'll slow down to your speed.
He wants the contact too!
- Usually no need to repeat information unless asked. Giving your Exchange twice the first time is usually good practice to avoid being asked.
- Listen carefully before attempting a contact or calling CQ. The bands are very busy during FD.
- Like Phone, type in the other station's call sign in before calling. You'll save time if he's a Dupe.



Hints for CW

- Don't hesitate to use software to do CW. If you can read and type, you can do CW.
- Remember, it's TWO points per valid contact as opposed to one for phone.
- No one cares if you used a straight key, paddles or software. It all counts the same.
- The Androscoggin IMAT van has computers with CW software and macros programmed so all you have to do is press the right button and copy down the other station's call sign and exchange. Software does the rest!



Hints for Digital Modes

- PSK31 and RTTY are the most popular Field Day Digital Modes
- The macros for Field Day should be set up just like those for CW. In other words, CQ should be something like: “CQ FD CQ FD de W1NPP k”
- No need for useless data like “thanks for...” or spelling out “MAINE”
- Digital is a good use of the CW transmitter when there are no CW operators around. It’s easy and pretty foolproof if the right Macros are used.



BONUS POINTS

- Satellite QSO (just 1) – 100 points
- Demo of Natural Power – 100 points
(bicycle generator, solar panel, wind turbine)
 - Need to make 5 contacts minimum
 - Counts as one of the transmitters while in use
 - Includes batteries charged by alternate power (like a solar panel, for example)
- Copying the special CW FD Bulletin from W1AW. (must be copied over the air) – 100 points