

THE eQRM

Field Day is 25-26 June 2016

JUNE 2016



The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

Repeater 145.310 pl 131.8

On the cover :

Field Day is 25-26 June 2016. All are welcome. Beaver Valley Amateur Radio Association will be set up at Old Economy Park in Baden, Pennsylvania. Turn left at the pool, drive to the end of the park. Come see what's going on!

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Check in to our nets

Wednesday 2 Meter

8:30PM on 145.310 MHz p1131.8

Wednesday 10 Meter

9:00PM on 28.470 MHz

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Who We Are

2016 BVARA OFFICERS

President: Jack Spencer, KZ3Z

Vice President: Dick Hanna, K3VYY

2nd Vice Pres.: Rob Miller, N3OJL

Treasurer: Pam Spencer, W3PMS

Secretary: Norm Trunick, K3NJT

Director: Bob Winkle, N3AZZ

Director: Bob Croft, KB3RHN



MONTHLY MEETINGS

E-Board meetings are now held the Saturday before the monthly club meeting.

VE testing begins at 5:00 PM.

Regular meetings are at 6:30 PM

All meetings are held at
Beaver County
Emergency Services Center
351 14th Street
Ambridge, PA 15003
on the second Thursday of every month
(unless otherwise stated).

2016 MEETING DATES

Jun 09

Jul 14

Aug no meeting

Corn Roast Aug 20th

Sep 08

Oct 13

Nov 10

Dec no meeting

Christmas Party Dec 3rd



This Month

Weekly

Thursday Morning Breakfast
(or you can have lunch)



The BVARA meets every Thursday at Steak 'n Shake in Center Township, by the Beaver Valley Mall, at 10:00 AM. All radio amateurs are encouraged to come join us at our Thursday morning breakfast.

See you Thursday at



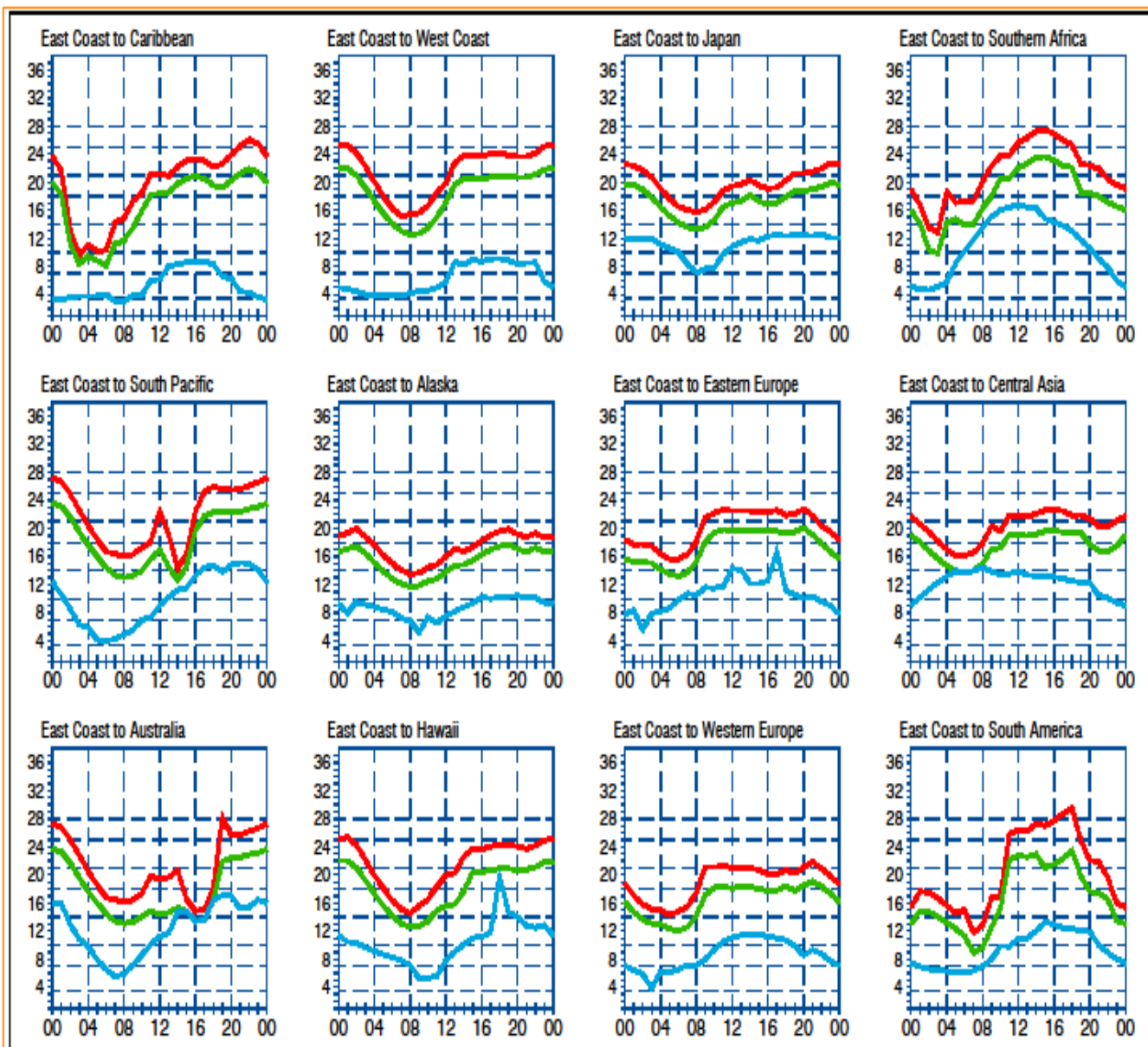
RACES / ARES
eQRM Urges All County Hams to Participate.



The Monaca Steak and Shake has a great wait staff. Come let them take your order.

The eQRM urges all Beaver County licensed amateurs to participate in the County's RACES and ARES programs. Any Beaver County Amateur that is interested in participating in the RACES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the N3TN 146.850 MHz repeater (131.8 PL)

Propagation



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of June for the paths indicated. The horizontal axes show Coordinated Universal Time (UTC), and the vertical axes frequency in MHz. On 10% of the days of this period, the highest frequencies propagated will be at least as high as the upper red curves (HFF, highest possible frequency) and on 50% of the days they will be at least as high as the green curves (MUF, classical maximum usable frequency). The blue curves show the lowest usable frequency (LUF) for a 1500-W CW transmitter. For SSB or a lower transmitter power, the LUF will be somewhat higher than the blue curves indicate. See Oct 1994 QST, pp 27-30, and Feb 1995 QST, pp 34-36, for more details. The predictions assume an observed 2800-MHz solar flux value of 91. This is a Low level of solar activity. See the detailed propagation tables on *The ARRL Antenna Book CD-ROM*.

PROPAGATION

The East Coast propagation chart listed here is for June 2016.

If you would like more information on how to read these charts, or for more information on propagation in general,

please visit <http://arrl.org/propagation>

Get your License or Upgrade

If you are interested in getting your first FCC license or upgrading your current amateur radio license, the Beaver Valley Amateur Radio Association holds VE Test sessions (Volunteer Examinations) the second Thursday of each month at the Nine One One center in Ambridge Pennsylvania prior to our BVARA Club meeting. If there is no meeting there is no test session. Please come take your test with us!



For more information, contact :
Rich Soltesz, K3SOM
(724) 847-0610
k3som@arrl.net

VE TEST SESSIONS

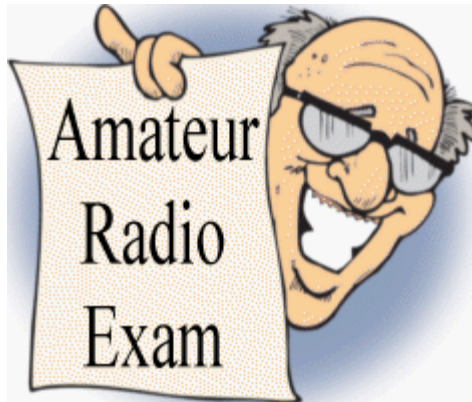
Beaver County Emergency Services Center 351 14th Street Ambridge, PA 15003.
Tests begin promptly at 5 pm on the same day as BVARA Club Meetings
(the second Thursday of the month).
All classes of amateur radio license tests are administered.

ALL candidates MUST bring ALL of the following:

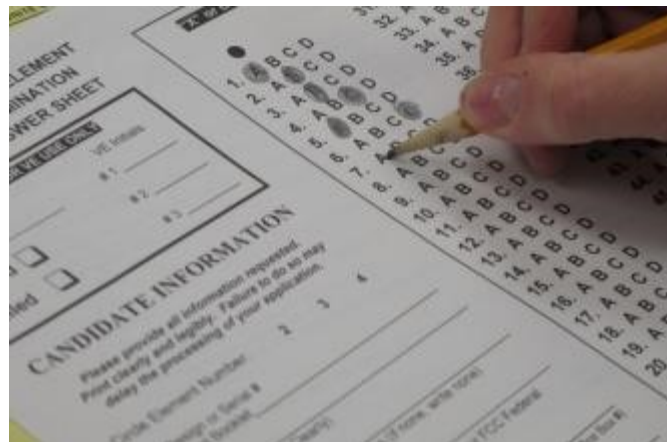
1. 2 forms of I.D. - one MUST be a photo I.D.
2. A pencil AND a pen with blue or black ink.
3. The original AND a photocopy of any valid ham license.
4. The original AND a photocopy of any C.S.C.E.
5. The test fee of \$15 - cash, check, or money order.

New License and Upgrades

BVARA VE Testing



Kevin Kearney - KC3HDU from Mars, PA passed his Technician Class exam at our May testing session.



Membership Information

By becoming a BVARA member you help secure the future of Amateur Radio in Beaver County. Additionally, the BVARA receives a portion of each ARRL

membership you purchase!

Join the BVARA and ARRL

Sign up for:	Price	
<input type="checkbox"/> BVARA full membership	20.00	_____
<input type="checkbox"/> BVARA student membership	15.00	_____
<input type="checkbox"/> BVARA associate membership	10.00	_____
<input type="checkbox"/> BVARA Child under 21 at home membership	5.00	_____
<input type="checkbox"/> One year ARRL membership	49.00	_____
<input type="checkbox"/> A Club Donation		_____
ARRL Member? Yes No	Total Enclosed	_____

Your License Class (If you have one.)

<input type="checkbox"/> Technician	Name _____
<input type="checkbox"/> General	Address _____
<input type="checkbox"/> Advanced	_____
<input type="checkbox"/> Extra Class	Email _____
<input type="checkbox"/>	Phone _____
	Your Call sign _____
	Your Signature _____

Make check or money order payable to:

The Beaver Valley Amateur Radio Association, P.O. Box 424
South Heights, Pa 15081

Hamfests & General Announcements



I went to the Breeze Shooter's Hamfest. It was great!
there are no more Hamfests in
Western Pennsylvania for
the month of June.

I think I will take a nap now and be ready for field day!

Contest Corral – June 2016

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start Date-Time	Finish Date-Time	Bands	Contest name	Mode	Exchange	Sponsor's Website
2 1700	2 2100	2B	NRAU 10 Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	www.nrau.net/activity-contests
4 0000	5 0400	1.8-2B	PVRC Reunion	CW Ph	PVRC: 1st year of membership, name, SPC, call sign when joined PVRC. Onths: Name, SPC	pvrc.org/reunion/reunion.htm
4 0000	5 2359	2B	10-10 International Open Season PSK	Dig	Name, SPC, mbr	www.ten-ten.org/index.php
4 0400	5 2000	3.5-2B	DigiFest	Dig	RST, 4-char grid square	www.miso.net/miso/DigiFest
4 0800	4 0800	7-14	Wake-Up! QRP Sprint	CW	RST, serial, suffix of previous QSO	qrp.ru/contest/wakeup
4 1200	5 1200	3.5-2B	SEANET Contest	CW Ph	RS(T), serial	www.seanet2016.com/contest.php
4 1300	5 1300	50	UKSMG Summer Contest	CW Ph Dig	RST, serial, 6-char grid square	uksmg.org
4 1500	5 1459	1.8-2B	IARU Region 1 Field Day, CW	CW	RST, serial	darc.de/infostats/contest/field/
4 1500	5 1500	7-50	Dutch Kingdom Contest	CW Ph	RS(T), serial	dkars.nl/index.php?page=rules
4 1500	5 1500	1.8-2B	RSGB National Field Day	CW	RST, serial	www.rsgbc.org/hf
4 1800	5 0400	1.8-2B	Alabama QSO Party	CW Ph	RS(T), county or SPC	www.alabamاقsoparty.org
6 1900	6 2030	3.5	RSGB 80 Meter Club Championship, Data	Dig	RST, serial	www.rsgbc.org/hf
7 0100	7 0300	3.5-2B	ARS Spartan Sprint	CW	RST, SPC, power	arsqp.blogspot.com
10 1900	10 1959	3.5-7	HASNS Sprint Memorial Contest	CW	RST, mbr or "NM"	radioamator.honlapopites.hu
11 0000	12 1559	3.5-2B	DRCG WW RTTY Contest	Dig	RST, CQ zone	www.drcg.de/drcgww
11 0600	12 0600	3.5-2B	VK Shiras Contest	CW Ph	RS(T), Shire or CQ zone	vlshires.vl2bo.com
11 1100	11 1300	14-21	Asia-Pacific Sprint, SSB	Ph	RS, serial	jafc.org/apssprint/aprule.txt
11 1200	12 1200	3.5-2B	Portugal Day Contest	CW Ph	RS(T), district or serial	www.rsp.pt/portugal_day_contest
11 1200	12 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, years a ham, mbr or "none"	www.skccgroup.com
11 1500	12 1500	3.5-2B	GACW WWSA CW DX Contest	CW	RST, CQ zone	www.wsatat.org/english
11 1800	12 1800	50	REF DDFM 6 Meter Contest	CW Ph	RS(T), serial, 4-char grid square	concours.ref-union.org/reglements
11 1800	13 0259	50 and up	ARRL June VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/june-vhf
15 0030	15 0230	3.5-14	NAOCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info/aprint201606.html
15 1900	15 2030	3.5	RSGB 80 Meter Club Championship, CW	CW	RST, serial	www.rsgbc.org/hf
18 0000	19 2359	50	SMIRK Contest	CW Ph	Mbr (if any), 4-char grid square	www.smirk.org/contest.html
18 0000	19 2359	1.8-2B	All Asian DX Contest, CW	CW	RST, 2-digit age	www.jar1.org/English
18 1200	19 1159	3.5-2B	Ukrainian DX Classic RTTY	Dig	RST, Oblast or serial	urdx.org/hf/ty/rules.php?english
18 1400	18 1800	144, 432	AGCW VHF/UHF Contest	CW	RST, serial, power/ 6-char grid	agcw.org/index.php/en
18 1400	19 1400	50	IARU Region 1 50 MHz Contest	CW Ph	RS(T), serial, grid square	concours.ref-union.org/reglements
18 1500	19 1500	1.8	Stow Perry Topband Challenge	CW	4-char grid square	www.kkn.net/stow
18 1800	19 0200	3.5-2B	West Virginia QSO Party	CW Ph Dig	RS(T), county or SPC	www.qsl.net/wvwsarc
18 1800	18 2359	(see rules)	Kids Day Contest	Ph	Name, age, QTH, favorite color	www.arrl.org/kids-day
18 2000	18 2159	1.8-50	Fold Hill Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/foldhillclub
19 0900	19 1500	50	WAB 50 MHz Phone	Ph	RS, serial, WAB square or country	wab.internip.net
20 0100	20 0300	1.8-2B	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	fpqp.org/pigrun
22 0000	22 0200	1.8-2B	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
23 0030	23 0230	3.5-14	NAOCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
23 1900	23 2030	3.5	RSGB 80 Meter Club Championship, SSB	Ph	RS, serial	www.rsgbc.org/hf
25 1200	26 1200	1.8-2B	His Majesty King of Spain, SSB	Ph	RS, province or serial	concursos.ure.es/en
25 1200	26 1200	3.5-2B	Ukrainian DX DIGI Contest	Dig	RST, Oblast or serial	www.izmail-dx.com
25 1800	26 2100	All (no WARC)	ARRL Field Day	CW Ph Dig	# of xmtrs, class, ARRL/RAC section or "DX"	www.arrl.org/field-day

All dates refer to UTC and may be different from calendar dates in North America. Times given as AM or PM are local times and dates.

No contest activity occurs on the 60, 30, 17, and 12 meter bands. Mbr = Membership number. Serial = Sequential number of the contact. S/P/C = State, Province, DXCC Entity. XE = Mexican state. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.hornucopia.com/contestcal/ and is extracted for publication in QST 2 months prior to the month of the contest. The ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column.

Bits and Pieces

This month is Field Day! This is one of the most enjoyable events I have experienced as an amateur radio operator. Field day is for practicing emergency operations. This facet of amateur radio is most important in times of national, state or local disaster. This day is set aside to practice for a real emergency situation.

There is a spark of excitement in the planning of field day that grows the closer it gets to field day. The questions start. Where will the location be, what radios, what anten-



nas will be used, will they be free standing, will they be supported by trees, what frequencies will we use, etc. Then there is the sleeping arrangement. Do I sleep in the car, van or maybe a tent or commute to home and back each day? I have seen some folks bring an RV. After the decisions are made, the day comes that it all has to be set-up. The hours before field day radio operations are exciting and extremely busy. I find I learn something new each time I attend a field day. I have learned how to put up antennas, how to run a generator, computer sharpening skills, interpersonal relationship building, patience, good safety practices and new ways to enjoy amateur radio.



During the first hours of field day the main effort is setting up the radio equipment. In this busy time not much food is consumed, only water and soft drinks are. After the busy set-up comes a break for the evening meal. Things slow down, quiet a bit and then it's time to recharge your batteries with a relaxing meal.

Food is another aspect of field day I enjoy. Ahhh the food, homemade is the specialty. There are homemade main courses and deserts. In the back of my mind I think, "Soon the radio contacts will begin". I always look forward to the breakfast! Knowing that there is going to be a great time of hot food and good friends keeps me going all night.



Invited non-radio operators attend mostly during the daylight hours. There are so many questions. This is a good way to get new folks interest-

Bits and Pieces



ing in becoming amateur radio operators. There is plenty of good talk and relaxing time to visit. Stories come from everyone. Some stories are radio related, while others are just plain fun. I find this a good time of making new friends and enjoying old friends.

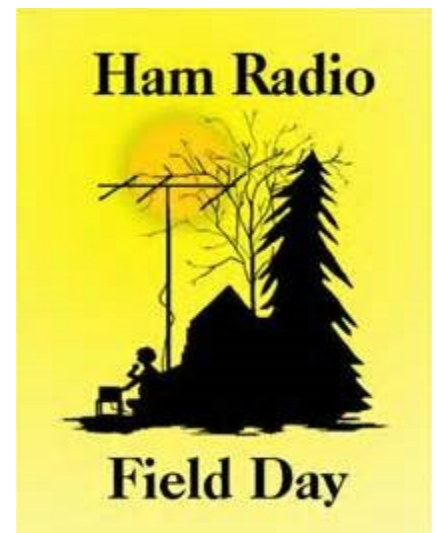
The excitement grows when we get to the operating radio hours. Yes! Tuning the dial and making that first contact. I enjoy the sound of “CQ ,CQ, CQ, W3SGJ Western Pennsylvania”. It

is so magical to me that we can talk to someone so many miles away over the airwaves. As Field Day continues into the night, attendance gets thin. Night time operations are even more interesting to me. There are few distractions and the radio operations become focused. It is all about radio operations and seeking contacts now. Radio operations are in a rhythm and the airwaves are full of operators focused on making contacts. The 24 hours of radio operations go so fast.



I enjoy the set-up and operating. I do not look forward to the necessity of teardown. Teardown signals that field day is over.

After everything is safely put away, I contemplate ways to make next year’s Field Day even better.



Some Interesting Links



Interesting call sign info

https://en.wikipedia.org/wiki/Amateur_radio_call_signs

Take a practice exam

<http://aa9pw.com/radio/index.html>

D-Star repeater directory

<http://www.dstarusers.org/repeaters.php>

Sun spot activity

<http://sunspotwatch.com/>

Unique way to support the ARRL

<http://www.arrl.org/news/view/shop-amazon-smile-for-father-s-day-and-support-arrl>

ARRL “The Doctor is In” podcast

a lively discussion of all things technical

<http://www.arrl.org/doctor>

For All Radio Operators



The Amateur's Code

CONSIDERATE ...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL ...offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE ...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY ...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED ...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC ...station and skill always ready for service to country and community.



Field Day 25-26 June 2016

Field Day

A Mirror of Amateur Radio History

Steeped in tradition and mystery, today's Field Day evolved from humble beginnings in the Golden Age of Radio. Anything but stable, Field Day rules and practices have changed radically since the 1930s.

Field Day 2016 is fast approaching and this is a good time to reflect on the history of this wonderful event. With the kind permission of the ARRL, large portions of the December 1999 *QST* article by Rol Anders, K3RA, are included here with more recent updates to provide insight into this event's fascinating history – a history that reflects changing technology, the creative spirit of competitive hams, and the ARRL's efforts to keep this event relevant and exciting for hams throughout its 83 elapsed historical years. Weather, propagation, competitiveness, public awareness, creativity, survivability, logistics, and so much more make this one event that stands out for hams and has become the hallmark of public awareness of the ham radio spirit in times of emergencies and natural disaster.

Here is a chronology of Field Day starting from the first outing in 1933. In the process of piecing this together, I learned (or relearned) much about what has happened to ham radio in the past 83 years.

1933: Field Day #1 - QSO Leader Uses 1x4 Call Sign to Save Time

Great ideas often have humble beginnings, and Field Day is no exception. A one-column announcement in the June 1933 *QST* states that, for 27 hours starting the second Saturday in June at 4 PM local time (no daylight savings yet!), there would be an opportunity for "portables" to go into the field to contact as many stations as possible. Says F. E. Handy, W1BDI, in the announcement, "The real object of this contest is to test 'portables' wherever they may be available.... If successful, we want to make it an annual affair." To score the event, each QSO with fixed stations will count 1 point, contacts with other portables count 2 points, and DX contacts count 3 points. Multiply QSO points by the total number of ARRL sections, plus countries worked. No mention is made of a required exchange, which clearly must include an ARRL section!

The September 1933 *QST* announces that the winner of the First Annual Field Day is a non-club group signing W4PAW. Club members made 62 QSOs and had a multiplier of 28 sections/countries for a grand total of 1876 points. The Central Illinois Radio Club, W9ZZAL, tops the QSO totals with 98! What's the "ZZ" all about? Until 1933 it had been necessary to get a special license to operate portable, and these licenses all had suffixes starting with ZZ. In 1933 the FCC allowed portable operation under a home call sign. Why did the CIRC use their old call sign? Well, operating portable under the new rule called for an even longer station ID - your call sign followed by the break sign (double dash) *three times*, followed by the call area (1 through 9)!

1934: 60 W is QRO!

It looks like Handy's wish is coming true - there *will* be a Field Day number 2! The Field Day period remains the same, although the chosen weekend in June will range from the first to the third for a long time to come, eventually settling on the fourth full weekend of the month.

The characteristics of today's competition are beginning to be established. Emphasis is shifted to the total number of stations contacted-the multiplier for sections and countries has been removed. At this point, multi-band contacts are not permitted. DX contacts, while still allowed, receive no special point advantage. The scoring system begins to resemble Field Day as we now know it, with 1-, 2-, or 3-point multipliers per QSO depending on power output. The technology of the '30s is

highlighted by the fact that the breakpoints are set at 20 Watts and 60 Watts! As technology changes these breakpoints are modified many times throughout the years to come.

The desire to encourage operation independent of public mains is also expressed by a 2X multiplier if either the receiver or transmitter is independent of public mains (3X if both are independent). The 3X multiplier is destined to last 37 years until it's removed in 1971! No special exchange is needed. The ops must simply indicate whether their stations are portable. At this early time in Field Day history, only portables are listed in the scores.

1936: The Year with Two Field Days!

The June 1936 Field Day is so popular a second one is held on August 22-23 with identical rules. Participation in both Field Days is about the same, as winning contact totals in June and August are 143 and 136, respectively.

1937: The "Field Day Message" is Born

The special Field Day of August 1936 apparently becomes Field Day number 4, as the Fifth *Annual* Field Day is announced for June 19-20. In a battle that continues to the present between creative rules interpretation and the "spirit of the law," the League outlaws "manufactured contacts with stations of the same field group." The Field Day message bonus, another venerable Field Day tradition, is born as 10 points (before multiplier) are awarded for a single properly formed and serviced message to League Headquarters stating the number of ops, location, "conditions," and power. Multipliers and QSO points are unchanged. For the first time, the winning QSO total exceeds 200 (204), with a breathtaking average rate of 7.5 QSOs per hour.

1938: I'm Not Ready to QRT!

The contest period is extended to 26 hours - from 4 PM Saturday to 6 PM Sunday.

1939: Everyone Form a Circle

For the first time, the area within which all equipment must be located is defined as a restrictive 100-foot radius. Do they mean this to include your 160-meter dipole?

1940: Modern Field Day Rules Emerge

Significant changes are afoot. For the first time, a station can be contacted on multiple bands. Results are grouped by the number of simultaneous transmitters used. The 100-foot circle expands to 500 feet, giving those multi-transmitter teams a little breathing room. Home stations are encouraged to work

For All Radio Operators

Field Day stations, and their scores will be listed, but no multipliers are allowed (a rule that never changed). The Field Day message to ARRL HQ now earns 25 points, points are given for Field Day handling of other teams' messages, and both home and portable stations get one point for each message copied and one point for a message passed on. From 1933 to 1980 message points will be changed no less than 12 times!

1941: Field Starts Simultaneously Across the Country (by Accident?)

The Field Day period now starts at 4 PM EST across the country. Strangely, this change may have come about by accident. To smooth the FCC approval every portable station (requires) for Field Day operation, the League informs the FCC of the Field Day period. In aptly numbered announcement 73-D, the FCC refers to a single operating period for all stations. My guess is that the League's communication to the FCC lists the period from 4 PM EST June 7, to 6 PM EST June 8, inadvertently establishing a single starting time.

Last year's change to allow contacts on multiple bands was apparently unclear, so this year's rules make a point to state that phone and CW are separate "bands" for the purposes of Field Day contacts. Also, even in these early days stations must be complaining about being in "black holes" as far as contesting is concerned. In response, an overall 1.5X multiplier is established for the Northwest, Pacific, Rocky Mountain, Southwest and West Gulf areas "to assist in equalizing contact opportunity...in these less populous areas." This West Coast handicap remains until 1950.

1942-1945: "Closed for the Duration"

As is the case with so many activities, Field Day posts a "Closed for the Duration" sign during WW II. In fact, so does all ham operating.

1946: The Post-War Era - A VHF-Only Category Debuts

Field Day returns after the war with virtually no changes. Starting time is back to local time (more evidence that the 1941 change was inadvertent). For the next three Field Days there is a VHF-only score listing designed "to lend point to the participation of VHF Emergency Corps networks that may wish to arrange special activities or simulated tests on these dates."

1948: CQ Field Day on 11 Meters?

Eleven meters is now available to hams (for a while) and it counts as a Field Day band. There are no CW/phone sub-bands on 11 meters, but phone and CW count separately here, too. The period is shortened to 24 hours, starting at 4 PM local time. Each station worked is now worth one point (regardless of whether fixed or portable). The 2X multiplier for transmitters that are independent of commercial mains is dropped. Battery operation now is recognized with a 1.5X multiplier.

1949: Field Day Mobile Operation Comes of Age

The growing interest in mobile operation results in some significant rules changes. This year, four categories are recognized: (1) Club and group (no battery multiplier); (2) One or two operators; (3) Mobile; and (4) Home stations. Also, the Club Aggregate Mobile listings are established whereby clubs can compete with teams of mobile stations. This special listing will last until it's quietly dropped in 1978. In other changes, a specific exchange of signal report and ARRL section is required for the first time, and the Field Day message now goes to the Section Communications Manager (today's SM) or the SEC rather than to HQ.

1950: Modern Field Day Classes are Established

The four classes offered last year are modified and labeled

with letters for the first time: A-Club or non-club portable; B-Unit or individual portables (1 or 2 ops); C- Mobile; and D-Home. The Field Day "circle" is increased to 1000 feet. The wording last year said "25 points for each such [Field Day] message." What was meant, we learn, was 25 points for each team's *single* Field Day message (some stations, not unexpectedly, had cranked out a pile of Field Day messages looking for 25 points *each*).

1951: Duck, Cover and Turn on Your CONELRAD Monitor

Says June 1951 QST: "At a time when civil defense is organizing, the Field Day provides an unparalleled opportunity for mass testing of our emergency facilities." To encourage emergency preparedness, home stations on emergency power will be listed separately as Class D, while home stations on commercial power will be listed as Class E.

1952: "Having a Wonderful Time, Wish You Were Here"

The 1950 rule that allowed one point for any message originated during Field Day has resulted in some groups cranking out meaningless "rubber stamped" messages during Field Day to generate points. Because the emphasis is on contact totals and not message generation, the League responds by eliminating the bonus points for message origination after a trial of only two years.

1957: Simultaneous Start Returns

Field Day starts at 4 PM EST and ends at 4 PM PST, as usual, but now everyone can operate any 24 consecutive hours of the 27-hour period. The purpose of the change is to "encourage long-distance QSOs." For the first time, more than 10,000 hams participate, a 430% increase over the first postwar event in '46.

1963: Will "Manufactured" Contacts Ever be Eliminated?

Although contacts with other members of a Field Day group were outlawed way back in 1937, some creative types have determined that the rules don't ban those who are not "Field Day operators" from using the Field Day transmitters to work the group for points. The League counters by allowing a Field Day transmitter to be used only under one call sign.

1966: The Modern "Bonus Era" Begins

The simple Field Day message bonus concept, around since nearly the first Field Day, is expanded, bringing the beginnings of a wonderful aspect that one wag, who shall remain nameless (KE3Q), has characterized as "part radio contest, part scavenger hunt." Publicity is emphasized and 100% freedom from commercial power is stressed by a 500-point post-multiplier bonus for achieving at least two of the following three: (1) Use of no commercial power anywhere; (2) Publicity; or (3) Originating a message to the SCM or SEC.

1968: The Field Day Period is the Field Day, Period

A major change is adopted that makes setup within the 27-hour period *mandatory*, and the starting time is advanced two hours to 1900Z to accommodate the change. All home stations, emergency powered or on commercial mains, now compete in a single D category. The 1.5X multiplier for battery power now applies to categories A, B and C. Bonuses provide for 200 points each for publicity, 100% emergency power and/or message origination. Lastly and largely ignored, the exchange is now section only - but in practice many can't resist sending a signal report anyway!

1969: An Idea Who's Time Has Not Come

Last year's mandatory setup within the 27-hour event period was not popular, so it is now optional (that is, ops can use the entire 27 hours if they start setup within that period).

For All Radio Operators

1970: Increasing Novice Participation

To further encourage beginners, a "free" Novice station (set up and run by Novices) is allowed for groups running three or more transmitters. The League continues to battle with creative rules interpretation (or, depending on your viewpoint, technology advancements) by outlawing "octopus" hardware for interleaving transmissions to avoid moving to a higher transmitter category. On another note, I guess we are getting better at setting up, because the starting time is advanced yet another hour to 1800Z.

1971: Why Old-Timers Can't Remember Whether Home Emergency Power is Class D or E

After three years of being combined, Classes D and E are separate once again. The designators, however, are reversed. Class D is for home stations on commercial power, while Class E encompasses home stations on emergency power. (I guess the feeling is that E for Emergency makes more sense.)

Major changes in the scoring system reduce points across the board. The 3X multiplier for 100% emergency power is eliminated and replaced by a requirement that all A and B transmitters now *must* be on emergency power. The 1.5X multiplier for battery operation is eliminated and replaced with limiting the QRP multiplier to battery operation only. The power multiplier now applies to the maximum power used at any time during the period. The four-QSO multiplier categories are reduced to three with a maximum of 3X for QRP/battery. Bonus points are now as follows: 100 points per transmitter for 100% emergency power; 50 points for publicity; 50 points for message origination; and 5 points per message relayed. Last, in surrender to habit, the signal report is returned to the exchange!

1972: Batteries are on Their Own

Ops using battery power no longer compete with ops using non-battery sources. Scores are listed separately.

1973: The Space Age Comes to FD

The repeater rule is waived for OSCAR 6 contacts and a 50-point satellite bonus is instituted.

1974: The Energy Crisis Strikes FD

A 100-point bonus is added for making natural power QSOs. The 15-minute rule for band changes further discourages tricky techniques for counting two transmitters as one.

1975: Is SSB Taking Over?

SSB is demonstrating its superiority to "conventional" AM, and phone QSO rates are so high that the mode threatens to dominate Field Day. To compensate, the 2X rule for CW QSOs is instituted on a trial basis (personal note: Hooray!).

1976: The 10,000 QSO Mark is Broken

Field Day results show the many unusual prefixes permitted by US amateurs celebrating the Bicentennial. W1VW/1 celebrates with 10,010 contacts! In doing so, the group surpasses the 1933 QSO record in its first 15 minutes of operation.

1977: Bring on the Techs!

Technician amateurs are now permitted to set up and operate the Novice station. Also, we have apparently solved the energy crisis because the natural power bonus is gone! The 2X rule for CW is "permanent."

1980: 1A CT

RST is replaced with category and class in the exchange. FCC and Field Day rules no longer require portable call sign designators. Setup time is tightened - nothing can be installed prior to 24 hours before the start of the Field Day period. Natural power was judged to be politically correct and too

much fun to be eliminated - so it's back as a 100-point bonus. The satellite and Field Day message bonuses advance to 100 points. Copying the W1AW message is worth 100 points for the first time.

1981: 1001001

Computers are becoming ubiquitous and, as a result, packet radio is soaring in popularity. Field Day enters the digital era by providing a 100-point bonus for a single packet QSO, permitting one "free" packet station and waiving the repeater rule for packet to allow digipeaters and nodes to be used. The 15-minute rule is eliminated at VHF and above. The Yankee Clipper Contest Club and The Wireless Institute of the Northeast combine using call sign W2RQ to turn in a QSO total of 11,201 - unbeaten 18 years later!

1984: We Finally Get it Right

Over the years we've had a heck of a time settling on the best way to score battery, low, medium and high power categories. Here's another try: The power breakpoints are adjusted so that the 5X multiplier applies to 5 W instead of 10 W (for battery or equivalent), and 2X applies to <150 W rather than <200 W. (These definitions will stick for at least the next 16 years! In particular, the 5X multiplier for QRP/battery turns out to be a good equalizer - the change will result in overall first place finishes by the entrants in this category in eight of the next 16 Field Days.)

1993: VHF Becomes a Major Field Day Factor

The growing influx of Technician licensees changes Field Day in a big way - there is now a 100-point bonus for making 10 VHF/UHF contacts and one "free" VHF/UHF station is permitted for Classes A and B.

1994: I Guess They Don't Need a 1.5X "Equalizer" Anymore

K6CAB (Conejo Valley ARC) logs the modern Field Day record score of 30,150 by operating in the 15A battery category with 3460 5-W QSOs!

1998: No More "Zero A" Entries

This year digital modes go from special handling to "mainline" modes. Although the "free" packet station and packet bonuses are eliminated, digital modes (including RTTY and PSK31) are added as a third mode on every band. Perhaps motivated by the "0A" tongue-in-cheek entry made by one station working exclusively on packet via the internet (thus *no* transmitters!), nodes and digipeaters are now outlawed for Field Day contacts. Finally, VHF/UHF has become such a mainstay that the 100-point bonus for 10 contacts is no longer needed.

2000: QRO for All Transmitters and Public Awareness

With the advent of 200-watt transmitters, the power multiplier is set by the highest power output of any of the Field Day transmitters. Bonus points are now given for setup in a public place and for a public information table. Bonus points are also given for 5 QSOs from "alternative energy sources."

2001: "Harrumph, Harrumph!"

Bonus points are added for a visit from an elected government official or ARES representative or law enforcement officer by invitation. Cabrillo files not needed.

2002: Field Day for IARU Region 2

All hams in the Americas may now take part in Field Day. The Novice-Technician station is now replaced by a GOTA station that may include unlicensed operators working under a control operator.

For All Radio Operators

2003: There's High Power and there's HIGH POWER!

High Power definition is tweaked to be the lower of either 1500 W PEP or the maximum allowable power level for that country.

2004: Summary Submission Gets Easier

A web-based applet for summary submission speeds up reporting (almost) but supporting documentation is still required.

2005: Phantom Transmitters/Operators Need Not Apply

All transmitters must be on the air with an operator to count towards a club's entry class. Sufficient equipment is required for simultaneous operation. A limit of 20 stations for emergency power credit is set. A 'youth element' bonus is given for each person 18 or younger. GOTA stations must now use the main station's exchange.

2007: Satellite Contacts and GOTA Tweaks

While working for the satellite contact bonus, you are limited to making only one QSO when using any of the single-channel FM satellites. GOTA stations worked for bonus points are lowered from 50 to 20, and then continue in multiples of 20 up to 100 QSOs per GOTA operator.

2008: Activity Bonus and more GOTA Tweaks

The old Demonstration Mode bonus is replaced by an Educational Activity Bonus. GOTA is expanded to include VHF bands, but only one VHF band at a time.

2011: Sporadic Encouragement

All Class A stations may use a free VHF station without increasing their operating category. This is designed to encourage more activity on 6 and 2 meters during the best Sporadic-E season of the year.

2013: More Setup Time

Setup may begin as early as 8 pm EDT on Thursday, but no more than 24 cumulative hours setting up is allowed.

2016: Field Day goes Social with Safety!

Clubs are encouraged to engage the public via social media platforms (Facebook, Twitter, etc.). A designated Safety Officer who completes a check-list of key safety issues will earn the club bonus points as well.

For All Radio Operators

If you think computer logging is a modern development, check out the key-punching station at the 1966 K21N0/3 Field Day effort. The cards containing the contact data were processed by an IBM 1401 computer at Johns Hopkins University after the event. KOOVZ is shown operating the key punch while WA2BUJ hunts for contacts.



In 1976 the Indianapolis Power & Light ARC made a natural-power contact.

Gary, K9LNX, operated the radio while Ron, WB9DKL, supplied the muscle.

Mike, WA9BWY, assisted by holding the bike in place.



For All Radio Operators

Another Field Day retrospective graced the December 1989 *QST*.



For All Radio Operators

By the '50s, Field Day had grown into a major event worthy of its own *QST* cover.



The eQRM is grateful to Maty Weinberg for permission to print extracts from QST Magazine included in this article.