

# Capers



December- 2021

The Monthly Newsletter of The Candlewood Amateur Radio Association P.O. Box 55 – Brookfield CT 06804 - 0055

Visit us on the Web at http://www.cararadioclub.org

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#### Next CARA Meeting: Friday, December 10

This meeting will be conducted via Microsoft TEAMS Video Conferencing.

Sign onto TEAMS at 7:00 pm for socializing and conversation, meeting begins at 7:30 pm. Teams conference invitation emailed to CARA membership.

#### 100 Years of Amateur Radio Transatlantic Communications



The early 1920s saw the dawn of international Amateur Radio.

### President's Message – de W1NSK



Once again, the Holiday Season is here! A time for family, friends and perhaps some time off to enjoy all the above.

It has been quite the year with the continual pandemic stresses, lack of meetings at Stony Hill Firehouse, and now the question of the CARA Holiday Party. Nonetheless, we managed to have a successful field day this year. We are hoping to have a fun Winter Field Day the last weekend in January at the Ball Pond Firehouse.

Come join us. Make new friends and see some old ones. Your participation is what this club is all about. We are looking for some new folks to join us and head one of our committees or propose and champion a new one! This is your Club and involvement is what it's all about. We all can learn from one another by being involved!

A couple of great operating events in December. One is the Ten Meter Contest the weekend of the 11/12. This is a great one for Technicians to get a taste of HF DX! With the Solar Cycle coming back towards its peak activity is increasing. Also, Straight Key Night on New Years Eve is always fun. Dust off that old Tube Rig and get on the air! Hopefully, our "Fists" are not too bad in this day of memory and electronic keyers with iambic paddles!

But most of all enjoy the holidays with your families and friends. Happy Holidays!

Bud

W1NSK - CARA President

# December 10 Meeting Agenda

#### Pledge of Allegiance

#### **Business Meeting**

Acceptance of Minutes as Published in CAPERS Treasurers Report Committee Reports Repeaters Website / Café Press??

#### **Old Business**

Poole Antennas Holiday Party: Vespucci Lodge / Grassy Plains Pizza Winter Field Day Chairperson

#### **New Business**

Future Speakers
Dayton Hamvention

News and Views: Round Robin members forum

Adjournment

# ARRL, RSGB Joint Events to Celebrate Centenary of Ham Radio Transatlantic Success

ARRL and the Radio Society of Great Britain will jointly sponsor events to celebrate the achievement of transatlantic communications by radio amateurs 100 years ago.

In December 1921, ARRL sent Paul F. Godley, 2ZE, as its representative to listen for amateur signals from North America during the Second Transatlantic Tests. Setting up his listening station in Ardrossan, on the west coast of Scotland, Godley received the signals of more than 2 dozen US amateur radio stations, the first on December 12 (UTC) from 1BCG in Connecticut, operated by members of the Radio Club of America. The message read: "Nr 1 NY ck 12 to Paul Godley, Ardrossan, Scotland. Hearty Congratulations. (Signed) Burghard Inman Grinan Armstrong Amy Cronkhite."

These successful transatlantic tests and the ones that followed would spur technological advances and new global wireless distance records. Several amateur radio operating events this year and next will commemorate the centenary of these significant milestones that heralded the dawn of two-way international amateur radio communication.

# 160-Meter Transatlantic Centenary QSO Party 0200 to 0800 UTC on December 12, 2021

ARRL and RSGB will activate special event stations for 6 hours (0200 – 0800 UTC) on December 12 for the 160-Meter Transatlantic Centenary QSO Party. The RSGB will activate GB2ZE from Scotland, with a team of stations from the GMDX Group sharing operating duties. ARRL will activate W1AW. The stations will operate only on CW. If transatlantic propagation holds up, the stations may continue to operate beyond 0800 UTC.

The GMDX Group of Scotland will award a *quaich* — a traditional Scotlish drinking cup representing friendship — to the *first* stations in North America and the UK to complete contacts with both W1AW and GB2ZE during the QSO Party. A commemorative certificate will be available for download.

# Transatlantic Centenary Marathon December 2022

The RSGB and ARRL are also organizing an international amateur radio marathon on the HF bands to commemorate transatlantic tests held between 1921 and 1923. The Transatlantic Centenary Marathon will take place in December 2022. The objective will be to mark these historic events by encouraging all radio amateurs to get on the air. Event details are pending.

ARRL and RSGB have assembled a list of stations and groups that are also organizing events and activities to celebrate 100 years of amateur radio transatlantic communication. For more information, visit <a href="mailto:arrl.org/transatlantic">arrl.org/transatlantic</a> and <a href="mailto:rests">rsgb.org/transatlantic-tests</a>. The sites also include links to many previously published articles and presentations covering the historic tests.

#### **Events and Activities**

Nov. 13- 14, 2021	Transatlantic QSO Party, sponsored by the Radio Club of America (RCA), and commemorating the contribution of RCA members who constructed and operated the 1BCG transmitter site in Greenwich, Connecticut, that sent the first message received by Paul Godley, 2ZE, in Scotland.
Dec. 1-26, 2021	Special Event GB1002ZE. The Crocodile Rock Amateur Group (CRAG) based near Ardrossan, Scotland, will activate the special event station GB1002ZE to commemorate the successful reception of amateur transatlantic signals by Paul Godley, 2ZE, in 1921.
Dec. 3-5, 2021	2021 <b>ARRL 160-Meter Contest</b> . This 42-hour CW-only annual contest is most similar to the original Transatlantic Tests of the early 1920s. The RSGB is planning to activate special call signs to commemorate the Transatlantic

	Tests.
Dec. 11, 2021 to Dec. 31, 2022	W1AW Commemorative Transatlantic QSL Card, sponsored by ARRL. US stations working W1AW, the Hiram Percy Maxim Memorial Station, may QSL with a SASE; international stations should QSL via the Bureau. See details.
December 12, 2021	160-Meter Transatlantic Centenary QSO Party (six hours; 0200 – 0800 UTC), organized by ARRL and RSGB. The RSGB will activate GB2ZE from Scotland, with a team of stations from the GMDX Group sharing operating duties. ARRL will activate W1AW. The stations will operate only on CW. If transatlantic propagation holds up, the stations may continue to operate beyond 0800 UTC. The GMDX Group of Scotland will award a <i>quaich</i> — a traditional Scottish drinking cup representing friendship — to the <i>first</i> stations in North America and the UK to complete contacts with both W1AW and GB2ZE during the QSO Party. A commemorative certificate will be available for download.
December 2022	<b>Transatlantic Centenary Marathon</b> , organized by ARRL and RSGB. Event details are pending.

#### **Articles and Stories**

#### **QST**

"The Story of the Transatlantics" - QST, February 1922

"The Transatlantic Tests" - by Michael Marinaro, WN1M (SK), QST, May 2014

#### **ARRL News Archive**

"ARRL, RSGB Announce Joint Events to Celebrate Centenary of Ham Radio Transatlantic Success" - ARRL News, September 23, 2021.

"Transatlantic Tests Mark 99th Anniversary" - ARRL News, December 9, 2020

"Transatlantic Reception Anniversary Special Event Set for December 11" - ARRL News, December 7, 2016

#### **Other Sources**

"The first Top Band DX Contest – the 1921 Transatlantic Test" - by Frank Donovan, W3LPL, slides (PDF) from his presentation at the 2012 Top Band Dinner

# Two 160-Meter Events in December Give Nod to 1921 Transatlantic Tests

In December, there will be two opportunities for 160-meter operators to fill the airwaves with activity and to test skills and stations on that band. The events take place a century after the transatlantic tests of the 1920s, which ushered in the dawn of international amateur radio communication.



This famous cover of the January 1922 issue of *QST* trumpets the success of the Second Transatlantic Test and lists the stations that Paul Godley, 2ZE, copied (or received) in Scotland.

The annual <u>ARRL 160-Meter Contest</u> begins at 2200 UTC on Friday, December 3, and ends at 1559 UTC on Sunday, December 5. This 42-hour CW-only contest is most similar to the original transatlantic tests. This contest typically attracts a good crowd and presents a challenge to operator skill and station performance.

The Radio Society of Great Britain (RSGB) is planning to activate special call signs to commemorate the centenary of the tests. Stations from the UK and Crown Dependencies will use up to seven different call signs, each having a "6XX" suffix: G6XX, England; GD6XX, Isle of Man; GI6XX, Northern Ireland; GJ6XX, Jersey; GM6XX, Scotland; GU6XX, Guernsey, and GW6XX, Wales. In addition, listen for UK stations appending the suffix "/2ZE" to the station's call sign. Use of this commemorative suffix has been authorized for use December 1 - 26 by Ofcom, the UK's communications regulator.

On December 12 -- and not to be confused with the ARRL 160-Meter Contest -- ARRL and the RSGB will jointly sponsoring the 160-Meter Transatlantic Centenary QSO

<u>Party</u>. This 6-hour event will run from 0200 to 0800 UTC. The event coincides with the 100th anniversary of the successful Second Transatlantic Tests. Participating stations will operate only on CW, trying to contact the two official call sign activations, W1AW and GB2ZE. The stations may listen for callers 1 kHz above their transmitting frequency, to shift the pileup from their transmit frequency. They may also periodically ask for DX callers only. The exchange is call sign and signal report.

During the QSO Party, ARRL will activate W1AW from Newington, Connecticut. RSGB will activate GB2ZE with help from a team of stations, including members of the GMDX Group of Scotland sharing the operating duties. GB2ZE commemorates the call sign of Paul Godley, 2ZE, who was sent by ARRL to the UK to lead the second Transatlantic Test in December 1921.

W1AW will be active for all 6 hours. Stations operating as GB2ZE will follow this schedule:

- 0200 UTC, from the commemorative station at Ardrossan, Scotland
- 0300 UTC, from GM3YTS
- 0400 UTC, from GM0GAV
- 0500 UTC, from MM0ZBH
- 0600 UTC, from MM0GPZ
- 0700 UTC, from GM4ZUK until 0800 UTC, or until the band closes at sunrise.



The cover of the December 2021 issue of *QST* commemorates the centenary of the Transatlantic Tests, which contributed to the rise of international amateur radio communications in the 1920s.

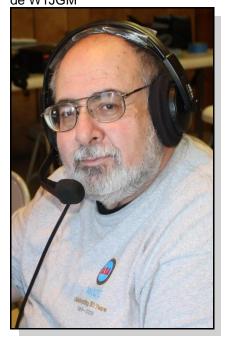
The GMDX Group will award a *quaich* -- a traditional Scottish drinking cup representing friendship -- to the first stations in North America and the UK to complete contacts with both W1AW and GB2ZE during the QSO Party. A commemorative certificate will be available for download. Participants will not have to submit logs. The official logs from W1AW and GB2ZE will be used to determine the winners and for certificates.

For additional details.

visit <a href="http://www.arrl.org/transatlantic">http://www.arrl.org/transatlantic</a> or <a href="rsgb.org/main/activity/transatlantic-tests">rsgb.org/main/activity/transatlantic-tests</a>.



# Vice- President's Message: de W1JGM



Well - it's December, and the end of 2021.

So, first let me take this opportunity to wish everyone John G. Morelli - W1JGM a safe and Happy Holiday Season.

I'm hoping 2022 is a much better year.

There are several events that are in the planning stage. Availability and interest will determine our course of action.

Within the next two months, we'll hold a Christmas Party – the date and place to be determined.

As of the time I'm writing this, there's no planned presentation for the business meeting on December 10.

If you have a presentation and would like to share, please let Bud or me know.

Our Planning Meeting for December 24th will need to be rescheduled, since it falls Christmas Eve.

We discussed gathering on January 8<sup>th</sup> to view "Ham Radio University", a web-based presentation., possibility at the Ball Pond Fire Company in New Fairfield. Check out their website for more

#### information:

https://hamradiouniversity.org/participatingorganizations/

And, as the end of January rolls around, we'll be setting up for winter Field Day. https://www.winterfieldday.com/

These activities are only successful with your participation, so try to join your fellow club members.

For anyone looking to become licensed or upgrade, the NARA club is planning a VE (Volunteer Exam) session in January. The time and place to be announced.

I would like to welcome our newest CARA member, William Sterling - K4000.

If you're interested, we still have a couple of batteries left for sale. Contact me for information.

73,

John G. Morelli - W1JGM Candlewood Amateur Radio Association, Vice-President

# November 12 Monthly Meeting Minutes de N1GSA



Meeting called to order at 7:35pm by Pres. Bud Kozloff.

There were 16 people present.

K5ZD, Randy Thompson gave a presentation on Tips for contesting success. He has been active in contesting for over 45 years. A successful contester is prepared for the activity. Much of this preparation focuses on station design, antennas, station configuration, reliability etc. Familiarity with your equipment is certainly important. Are things clearly marked? Are there intermittent things you know you should fix?

A successful contester has a plan. What is your goal? Strictly fun? Certificate? Set a record?

What category should I set my goal for? Band, Power, Assisted or Unassisted? Single or Multi-Op? Do you focus on Sections, Zones, Countries, or Prefix?

Check your past performance. Old logs are your friend. Compare past logs because things don't really change that much from year to year. Bands may change but productivity/time usually does not.

A contester needs to be consistent. Good habits have a rhythm and sequence and require less thinking and less energy. With experience you are able to focus on other things. Learning to type is key to error free logging. Don't spend time on things that don't help complete the QSO. Avoid wasting time with extra words.

For phone, find a rhythm that suits the conditions, say your call often, use standard phonetics, speak clearly.

For CW, speed depends on conditions, use the computer to send, cut numbers may be OK maybe not, Practice is always helpful.

For maximum score, RUN. Search and Pounce when you can't run, when you need mults, or when looking for a new run frequency.

Listen to Good Ops, study what they are doing that makes them good. Record an hour of your own operating and listen to it to see where you can improve. You might be surprised to find how fatigue impacts your success.

A successful contester is accurate. Many contests have a penalty for errors. Errors DO happen. Focus on how to prevent them. Log washing is not an acceptable practice. When the contest is over, just send in the log.

This presentation was very informative with many useful questions from the attendees.

Regular meeting began at 9:05 with 12 people present.

Pledge of Allegiance was recited.

Treasurer reported an opening balance of \$8107.63 Ending balance of \$7761.39.

Minutes of the previous meeting were accepted as printed in the CAPERS.

There was nothing to report from the Repeater committee. NARA is in process of making much awaited improvements for the Linking System.

Membership Committee reported 2 new members. Due's payments have been received from these people. One has just moved back to the area after 37 years.

There were some problems recently with the website. Jim R helped sort these out along with Charlie.

We are still looking for a few people to lead various committees. Website committee being one.

Old business: We are still waiting for the Stony Hill Firehouse to be open for gatherings from the outside people. The Zone 1 card sort, that we usually do in January, will probably not be possible without this facility.

The Planning Meeting for November will be moved to December 3rd due to the regular date falling just after Thanksgiving.

It was asked if there was any interest in having a Christmas Party. Harlan has spoken with Grassy Plain Pizza, and they are agreeable to hosting this with details to be worked out depending on the date. This will be further discussed at the Planning Meeting.

New Business. We are set to use Ball Pond Firehouse for Winter Field Day. It was suggested that we upgrade the food for this year. Harlan mentioned that January is usually our annual card-sort. This has been the Region 5 South ARES has been using Zoom for meetings, but it could be much more useful if we support this with TEAMS. Motion made, seconded, discussed and passed for CARA to support the ARES meetings with our Teams access. As most of the ARES members are also CARA members this should not be a problem. Harlan and John will work on this.

John mentioned the POTA activation that he had done recently at Squantz Pond State Park. Harlan stopped by and operated for a bit. They made over 80 contacts in just a few hours. There is a "late shift" in the POTA program for those operating from a park from 7pm to midnight. These activators get extra credit for these contacts.

We then had a round robin to find what folks had been doing recently. This was very interesting.

Meeting adjourned at 9:55pm.

Respectfully submitted, Gary S. Adams - N1GSA, Secretary

#### **December 3 Monthly Planning Meeting Minutes**

Meeting called to order at 7:35 pm by Pres. Bud Kosloff.

Pledge of Allegiance was recited.

There were 10 people present.

First order of business was the announcement of the passing of Joel Hallas. Chief editor for the "Doctor is in" in the QST magazine. It was suggested that we send a condolence card to his wife. Gary will see that this is sent immediately.

The Holiday Party was the next order of business. It is too late to really do this ourselves. It could be a possibility to do this on the Vespucci Pasta night as a club gathering. We have also discussed in the past to do it at Bethel Pizza. This will be discussed further at

the regular meeting on December 10th. Bud will send an email to see what interest may be generated. cancelled according to John Ahle. As we have no place to do this due to no openings at Stony Hill Firehouse. It may be possible to have a face-to-face meeting at another venue.

Dave KB1ZAC has mentioned that the new Bethel PD has a hall that may be available. Charlie will check with them to see if that room might be available.

Certificate of Appreciations will be developed and sent to our recent program presenters.

A takedown work party for the Pool equipment is tentatively set for next Sat. the 11th. Bud will check with Jennifer.

Ham Radio University is upcoming and may be set-up for Ball Pond Firehouse. We could see this on the big screen. Might have pizza, soda, coffee, etc. This is always a very informative event usually running from 9am to 3pm. There are 18 different forums setup at the present time. The date is January 8th. The schedule is available online at Ham Radio University.org

Winter Field Day is set to be at Ball Pond Firehouse on January 29-30. We will need to shoot ropes, hang antennas, etc. Dave can get us in to Bethel EOC to retrieve the totes. The radios and computers need to be checked out and set-up.

We could get on the club list for 3830 scores.

It was suggested that we implement a Round Robin introduction and information about what others have been doing recently relating to Ham Radio.

We do not have at present any presentations for the next couple of months. If anyone has any suggestions bring them to the regular meeting.

Charlie mentioned that Danbury Library has space available for presentations. This could be a great way to introduce Amateur Radio to the public and answer questions relating to our hobby.

Bud spoke of Licensing classes to also prepare folks for their upcoming tests. There may be slide shows that are already prepared for some of this time and experimformation. Charlie will talk to the Library about this.

The website is still a work in progress. Currently, we can post new information to the site.

We did a Round Robin introduction and update on recent events of the participants.

Meeting adjourned at 8:50 pm.

Respectfully submitted, Gary S. Adams - N1GSA, Secretary

### Last Month's Meeting:

de W1QK

CARA hosted Randy Thompson – K5ZD, at our monthly meeting on Friday, November 12, which was conducted on the TEAMS video platform.

Randy Thompson, K5ZD, has been licensed and active in contesting since 1973 at age 13. He is an accomplished operator, having multiple single-operator wins in the ARRL Sweepstakes, CQ World Wide DX Contest, and the CQ WPX Contest, among others.

Randy is a past editor of the "National Contest Journal" and a co-founder of the eHam.net website. He was the Director of the CQ WPX Contest 2008-2013, the Director of the CQ World Wide DX Contest 2013-2016, and is a member of the CQ Magazine Contest Hall of Fame.

His presentation: "Tips for Contest Success", covered 5 areas that contribute to successful contest operations. Whether you are an experienced contester or someone who just wants to learn more about this aspect of the hobby, there was a tip that will help you.

His presentation was followed by a Q&A session.

CARA extends thanks to Randy for sharing his time and expertise and for answering our questions too.

W1QK will prepare and send a CARA Certificate of Appreciation to Randy for his Presentation.

#### K5ZD - At home in Uxbridge, MA







#### Connecticut Phone Net - CPN

This net now starts at 5:15 pm EST Monday through Saturday on 3.973 MHz.. Sunday: 10:00 a.m .EST 3.965 MHz.

#### **CARA Contributions:**

Tom Coury, WX1T: CPN manager Wednesday Net control: Harlan, W1QH

Dec. 19: Big Stew Perry 160M Contest

Dec. 24: CARA Monthly Planning Meeting via

**TEAMS** (subject to rescheduling)

Dec. 8, 15, 22, 29: CWops CWT 1300Z & 1900Z Wednesday, and 0300Z (Thursday)

Jan. 7: January 2022 Capers input deadline

#### **Complete Contest calendar at:**

http://www.hornucopia.com/contestcal/contestcal.html

#### New England and other local hamfests:

http://web.mit.edu/w1gsl/Public/ne-fleas



#### Weekly CARA Sunday club NETS:

28.490 MHz. USB 7:00 pm - 7:30 pm

W1QI 2M FM Repeater - 7:30 pm

#### **Upcoming CARA Calendar:**

Dec. 10: CARA December monthly meeting via

**TEAMS** 

Dec. 24: CARA December monthly planning meeting via TEAMS (Subject to

change)

Jan. 7: January 2022 Capers input deadline

# Worked All Connecticut Counties Award, WACC – Sponsored by CARA:

http://www.cararadioclub.org/activities

# 2021 Ham Exam Schedule



# **Upcoming Contests, Hamfests & Meetings:**

Dec. 10: CARA Monthly meeting via TEAMS

Dec. 10-12: ARRL 10M Contest

Dec. 11: ARRL Transatlantic QSO Party Dec. 13: CT ARES Region 5 South Monthly

Meeting



#### **Upcoming 2021 Amateur radio exams:**

http://www.arrl.org/find-an-amateur-radio-license-exam-session

#### **Cromwell CT**

12/13/2021

Sponsor: Middlesex VE Team, W1CWL

Date: Dec 13 2021

Time: 7:00 PM (Walk-ins allowed)

Contact: Paul Lux (860) 841-7868
Email: none given
VEC: ARRL/VEC

**Location:** Cromwell Police Department 5 West St CALL AHEAD!!! MASK REQUIRED

Rt 9N-exit 18. Rt 9S-exit 19

to 372/West St.

Cromwell CT 06416-2123



12/17/2021

**Sponsor:** Insurance City Repeater Club

Date: Dec 17 2021

Time: 6:00 PM (No Walk-ins / Register or Call

ahead)

Contact: James R. Livermore

(860) 593-2971

Email: ab1nh@mindspring.com

**VEC:** ARRL/VEC

Location: Bristol City Hall

111 North Main St Bristol CT 06010

#### **Norwalk CT**

12/18/2021

Sponsor: Greater Norwalk Amt Radio Club

Date: Dec 18 2021

Time: 1:00 PM (Walk-ins allowed)

Contact: Jon Perelstein

(203) 912-3990 **Email:** <u>ai1v@arrl.net</u> **VEC:** ARRL/VEC

Location: The Readiness Colllective Sono

Collection Mall 100 North Water St

Level 2 across from Talbots

Norwalk CT 06854





The Yankee Clipper Contest Club is a special purpose amateur radio club devoted to the pursuit of operating and technical excellence.

More information about the YCCC at: <a href="http://www.yccc.org/">http://www.yccc.org/</a>

**Source:** YCCC Reflector with credit to all contributors

Editor

Re: Working JA's on 160 - FT8 is a game changer

From: Ed Sawyer

Date: Sun, 14 Nov 2021 09:56:15 EST

Making it easier doesn't make it better. It just makes it

easier.

I am happy for those that get satisfaction for being able to do what they weren't able to do before with FT8. Just don't think you ar your RF station is getting better at it. The software is simply enabling Qs that would not have occurred before. Technological advancement in software doing nothing for the RF chain or the operator skill.

#### Ed N1UR

Re: Working JA's on 160 - FT8 is a game changer

From: Larry Banks

Date: Sun, 14 Nov 2021 10:30:23 EST

Actually, I beg to differ. FT8 allows us to make Qs in the midst of much higher QRN levels from all of the electronics stuff around us. Sort of like yesteryear when the ether was much quieter and we could make these with CW or even SSB. It's an "RF War," where we need a better defense against the neighbor's (offensive) RF noise. (I agree about Ed's comment about skill.)

73 -- Larry -- W1DYJ

#### Nano-stations

From: Kermit Lehman

Date: Tue, 16 Nov 2021 12:09:45 EST

Hello.

A while back Ray, NM2O, listed stations by size from 1 to 9 with respect to running ability. Ray's list is down below. I don't know if the format will survive groups.io so I've attached it as well.

Here's category 2's description:

2. Typical Starter: 100 watt radio and low dipoles at 30 feet, or verticals with poor counterpoise. (Power is OK, but low dipoles are at a disadvantage for DX. Vertical would have high losses.)

Ray categorized my station as a 1.5, which was accurate due to antenna shortcomings and RFI avoidance.

I would like to see if there are any category 2 stations in the YCCC. If so, please contact me directly (ktfrog007@aol.com), off the reflector.

Maybe we could get together to discuss operating strategies and perhaps form teams for contests like the NAQP or informal ones on the Contest Online Scoreboard. I am interested in CW and RTTY.

Thanks,

Ken. AB1J

1. Painfully Weak. QRP power and poor antennas. (Maybe be necessary due to zoning, HOA or RFI avoidance.) 2. Typical Starter: 100 watt radio and low feet or less. Dipoles below 60 feet for 160, 80 and 40. dipoles at 30 feet, or verticals with poor counterpoise. (Power is OK, but low dipoles are at a disadvantage for DX. Vertical would have high losses.) 3. Starter plus: 100 watt radio and tribander at 50 feet or less. Dipoles below 60 feet for 160, 80 and 40. tribanders are substantially more effective than older designs that were not modeled.) 4. Starter plus power: Add 1500 watt amp. Could have effective dipoles. 5. Effective Antennas: 100 watt radio and modern tribander at 70 feet or higher, effective dipoles added. on 80 and 160. 2 element shorty for 40. Perhaps add receiving antennas on low bands. 6. Effective Antennas plus power: 1500 Watt amp added. 7. Monobanders: 3 or 4 element monobanders. (Perhaps single band specialist.) Possibly add gain on 80 and 160. 8. Multi tower: 4 to 5 element monobanders on

separate towers. 4 squares on 80 and 160. 9. Multi tower and stacks: 2 or 3 level stacks on separate towers. 4 squares on 80 and 160.

Type 7, 8 and 9 are running 1500 watts.

Expectation for running:

Type 1: Typically unable to run. Majority of QSOs from S&P.Type 2: Short runs possible at good times to Europe. Perhaps 25% QSOs from runs. Type 3 and 4: Longer runs to Europe. 50% of QSOs from runs. Type 5 and 6: Europe runs are typical. JA runs possible. 66% of QSOs from runs. Type 6 and higher stations are in and out of pile ups quickly. Types 7 and up: Europe and JA runs typical for length of opening. 75% of QSOs from runs. Many rare multipliers call in.

Ray Conrad NM2O (nm2o@outlook.com) To:you (Bcc) + 1 more Details

The discussion about Little Pistols asked about station

To kick off the discussion, here's a conceptual grouping where each class is qualitatively better than the prior one.

A key question was asked: How loud do you need to be to run stations? Crunching some data from skimmer spots versus public logs might answer the question. Frequency selection is key for all stations. especially moderate size stations. (quick look shows K5ZD and KI1G with about 2x the QSOs compared to K1AR.)

- 1. Painfully Weak. QRP power and poor antennas. (Maybe be necessary due to zoning, HOA or RFI avoidance.)
- 2. Typical Starter: 100 watt radio and low dipoles at 30 feet, or verticals with poor counterpoise. (Power is OK, but low dipoles are at a disadvantage for DX. Vertical would have high losses.)
- 3. Starter plus: 100 watt radio and tribander at 50 (Modern tribanders are substantially more effective than older designs that were not modeled.)
- 4. Starter plus power: Add 1500 watt amp. Could have effective dipoles.
- 5. Effective Antennas: 100 watt radio and modern tribander at 70 feet or higher, effective dipoles on 80 and 160, 2 element shorty for 40. Perhaps add receiving antennas on low bands.
- 6. Effective Antennas plus power: 1500 Watt amp
- 7. Monobanders: 3 or 4 element monobanders. (Perhaps single band specialist.) Possibly add gain on 80 and 160.
- 8. Multi tower: 4 to 5 element monobanders on separate towers. 4 squares on 80 and 160.

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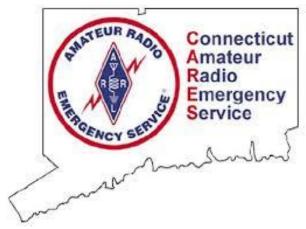
Recommendation for "Fun Contesting" Type 5 or 6 station. This station type allows running if desired. It allows working spots quickly. Working spots quickly can yield 60 to 100, depending on operator skills. 500 S&P QSOs per band are possible on 40 and 20 at low solar conditions.

Operator skill is definitely a factor at all station levels in running and working S&P effectively. Working S&P quickly can be a very good way to learn the active calls and about propagation.

73, Ray

Later Ray classified my station (AB1J) as 1.5.





Next CT ARES Winlink Wednesday: Wednesday, January 5, 2022



Visit this website to learn more about CT ARES and Winlink Wednesday:

http://www.ctares.org/

"When Everything Else Fails. Amateur Radio often times is our last line of defense... When you need amateur radio, you really need them."

The Hon. W. Craig Fugate

Former Administrator, US Department of Homeland Security, FEMA



N1MM Logger is the world's most popular free ham radio contest logging program. For CW, phone and digital modes, its combination of contest-optimized features is unmatched. The program's features are continually changing.



https://n1mmwp.hamdocs.com/n1mmfeatures/

ARRL SS CW - How to cross check log before submission

Donald Rasmussen Nov 8 #65039

Anyone know how to review the log for call mistakes based upon a previous year in N1MM or another user's file?

Steve London Nov 8 #65041

No. When the contest is over, put the "pen" down and turn in your "homework". You can review for mistakes AFTER the log submission deadline. Better yet, wait for your 73, Pete N4ZR Log Checking Results (LCR) to come out in a few months.

73, Steve, N2IC

K8BL BOB Nov 8 #65044 Steve,

I agree. Your Log is what you did as the Contest was taking place. That's why you ask for repeats until you have things right. Otherwise, you could iust copy a Call and S/N and fill all the other info later from various sources.

73, Bob K8BL

VE9AA – Mike Nov 8 #65045 Log scrubbing is usually a big no no. You likely didn't know.

Pete Smith Nov 8 #65046 I will be putting recordings of all 968 of my QSOs on qsorder.hamradiomap.com right after the log deadline. 73, Pete N4ZR Check out the new Reverse Beacon Network web server at

<a href="http://beta.reversebeacon.net">http://beta.reversebeacon.net</a>. For spots, please use your favorite "retail" DX cluster.

On 11/8/2021 2:52 PM, Steve London wrote: Barry D. JacobsonNov 8 #65048 If I am answering, not running, I sometimes listen to previous or later QSOs of same guy to make sure I have it right.

Barry Jacobson WA2VIU

Pete SmithNov 8 #65049

I just ran across a funny case. An active contester just wrote on another reflector to agree with my gripe about CH file accuracy. His ORZ account says he was last licensed in 1995, so I thought, "Damn, I miscopied." Then I listened to the recording, and he sent 94. I'm guessing he must have had a lowerlevel license before his Extra.

On 11/8/2021 3:04 PM, K8BL BOB LIDDY wrote:

Donald RasmussenNov 8 #65052

Thanks Mike - You are right - I generally don't even submit a log, its just for my own records. When I have submitted a file in the past it has been raw, and mainly for the benefit of the club stations that compete, as a cross check.

VE9AA - MikeNov 8 #65060

I humbly offer you this honest advice.
Submit your log just as it was the moment the contest ended. If you want to scrub your log afterwards for QSLing/Awards checking/personal satisfaction/whatever, don't look for advice on contesting messageboards but just do it....but don't make the scrubbed log the one you submit.

The contest took place during the contest. I think most of us know this. It's good info to surface from time to time, as the newer or unexperienced may not even give it a second thought and (wrongfully) believe a polished log is what the sponsor wants.

With respect, Mike VE9AA

Tim ShoppaNov 8 #65066

Not only are you not allowed to tweak your log after the end of the contest, you'll just be introducing more errors by trying to "fix" things. Just send the log in. Move on to the next contest.

Tim N3QE

Barry D. JacobsonNov 8 #65070 The bottom line is that contesting is about copying properly in real time. Especially in a CW contest, your skills are being tested.

Barry Jacobson - WA2VIU

\_\_\_\_\_

Keying from N1MM+

From: Tom Wagner (N1MM)

Date: Sun, 05 Dec 2021 09:33:29 EST If you would like answers, take this to:

https://groups.io/g/N1MMLoggerPlus/topics

You will need to know the radio type, and what type of keying interface he is using, e.g. native to radio, Prolific, FTDI, Winkey, etc.

Tom - N1MM

# The Amateur's Code **The Radio Amateur is:**

**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.

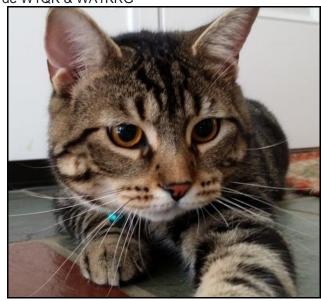
--The original Amateur's Code was written by Paul M. Segal, W9EEA, in 1928.

# STRAYS...

On 25 Nov of a certain year, cable television was invented by Ed Parsons. On Thanksgiving Day, his family watched KRSC's inaugural broadcast, although the TV station was 150 miles away in Seattle. He had set up an antenna on top of the hotel where he lived. He strung a cable from it to his living room. When he installed a set in the hotel lobby, other people saw the programs and asked for

### "CW's Corner"

de W1QK & WA1KRG



CW
Happy Holidays from W1QK, WA1KRG, CW,
CQ, and QSL

https://www.sciencealert.com/don-t-freak-out-or-anything-but-your-cat-is-tracking-your-movements/amp





a hookup to his high

antenna.

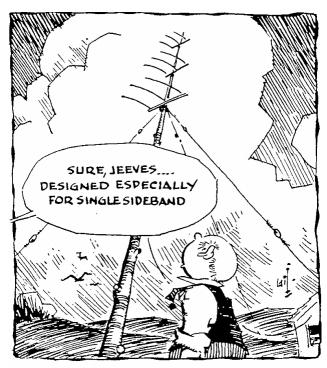
#### Local FM station

From: Bruce NJ3K #2431

Date: Wed, 17 Nov 2021 15:48:10 EST

There is a local FM station here that only plays slow songs, their call sign is WQRS.

Sorry I couldn't help myself (Smile) 73, Bruce NJ3K #2431



April, 1961

This would be great! 13 January 2015 | by Larry W2LJ | Share | | Leave a Comment (4) Jeff Murray K1NSS of Dashtoons fame, posted the following on Facebook today. This would be awesome if it were to come about and YOU can help make it possibly happen.

#### From Jim Massara N2EST:

"Eric Nichols, KL7AJ, and I are pitching the idea of returning Gil's classic "Jeeves" character in new cartoons to the pages of QST as a Rip Van Winkle character -- the hobby's changed, but he hasn't. We think it would be a great way to celebrate the League's centennial by connecting the hobby's past to its future. If you like the idea, email QST managing editor Becky Schoenfeld, W1BXY at <a href="mailto:bschoenfeld@arrl.org">bschoenfeld@arrl.org</a> and tell her so -- and to see this. I am going to send Becky an share this post of a sample cartoon in as many places as possible."



Jeff goes on to comment further:

"Fellow ham cartoonist/QSL artist Jim Massara N2EST and his partner in crime Eric Nichols KL7AJ are promoting the idea of a returning Gil Gildersleeve's Jeeves to the pages of QST. I think it would be swell to see Jeeves back where he belongs, trying to keep up like the rest of us geezers. It's a grand tradition. Many classic newspaper comics were carried on by other artists far far after the originals passed on. We grow up with cartoon characters like Jeeves, and they become little parts of our lives, and the continuity can be a small but real comfort."

Back to W2LJ - If I am not mistaken, 2015 is the Centennial of QST. I, for one, would love enthusiastic e-mail. I hope you'll do the same.

72 de Larry W2LJ

#### QRP - When you care to send the very least!

<u>Larry Makoski, W2LJ</u>, is a regular contributor to AmateurRadio.com and writes from New Jersey, USA. Contact him at w2lj@arrl.net.



# The Lighter Side of Ham Radio

https://www.gsl.net/k9gdt/radio/rh umor/rhumor.htm



#### OBVIOUSLY, MOODY, YOU DON'T CONCEPT OF A BOOM MIKE! HAVE THE PROPER

# Submit your "Strays" to the CARA Capers. The CW Operators' Club

#### cwops.org

The CW Operators' Club, commonly known as CWops, is an international organization, in membership and management, for amateur radio operators who enjoy communicating using Morse Code. Its mission is to foster the use of CW, whether for contesting, DXing, traffic handling, or engaging in conversations.

Visit the CWops website to learn more about CW Academy and how you can sign up for the popular & free on-line CW training classes.

https://cwops.org/cw-academy/cw-academyoptions/

To become a member of CWops: https://cwops.org/membership/

Source: CWops Reflector with credit to all contributors – Editor

The following files have been uploaded to the Files area of the main@cwops.groups.io group.

/topslist.txt By: ve3ki <ve3iay@gmail.com>

Description: List of call signs with CWT participation points as of November 1, 2021

November 9, 2021-----

132: AG3I, AG4EA, K3PP, K4TZ, KR2Q, N0TA

N4DT, N5PHT, W7LG, KC8J, N4FP, SM5IMO

VE3FP, W1QK



\_\_\_\_\_

Re: CW ops who like "complex" exchanges in various contests

From: Fred ["Skip"] Jensen

Date: Wed, 17 Nov 2021 15:11:53 EST

I have my ARRL Logbooks from 1953 - 1957 in So Central Los Angeles thanks to Mom and Dad. I dismantled my gear, packed it into the closet, and left for college in the summer of 1957. I tossed the logbooks into the bottom drawer of the desk. Many years later, they downsized to a doublewide in Santa Ana CA, and rescued the logbooks before selling my desk. Reading them now reminds me ... "It was definitely a different time!" Sample page [showing it's age] attached.

73, Fred ["Skip"] K6DGW #142

\_\_\_\_\_

QTH: TRENTON MI Operating Time (hrs): 25 min

Summary: Band QSOs 20: 18

Total: 18 Mults = 18 Total Score = 324

Club: Mad River Radio Club

Comments:

What a mess...woke up the laptop at 18:45.... darn thing didn't respond and N1MM didn't kick in until 19:26....I managed to get in 18 QSOs until everything crashed at 19:54 .. maybe 20 minutes worth of air time..

I updated this Laptop to Windows 11 about a week ago, its been flawless and fast until today...

73 Mike K8VA #2468

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Order pizza by CW

From: Saul W3WHK

Date: Fri, 05 Nov 2021 01:44:10 EDT

This from the Southgate ARC(UK) via the Australian DX News via Glenn Hauser's World of Radio mailing list. Apparently applies specifically to the UK.

Saul W3WHK

\_\_\_\_\_

#### You Can Now Order Pizza with Morse Code!

For the first time ever, popular pizza delivery chain Papa John's is offering its customers the chance to order pizza via Morse code to celebrate its partnership with Call of Duty® and the new World War II game, Vanguard.

Available from 28th November 2021, pizza lovers can transport themselves back in time by ordering their Papa John's treats through dashes and dots.

They'll simply need to sign up at <a href="https://www.papajohnsmorsecode.co.uk/">https://www.papajohnsmorsecode.co.uk/</a> win the chance to get their hands on a complimentary Morse Code Kit and order themselves a free Call of Duty®

Bundle, including one large pizza, classic side, large drink, and access to bonus in-game items, delivered in a limited-edition pizza box.

Those who receive a Morse Code kit will need to get their head in the game to crack the code and unlock a complimentary Call of Duty® Bundle. Customers will need to guess one of the five game-related codes and translate this into Morse topping: Cheese and Tomato, All the Meats, Vegan Garden Party, Hawaiian or Double Pepperoni.

Giles Codd, UK Marketing Director at Papa John's said: "We're super excited to launch a first with our Morse code ordering service and to continue our partnership with Call of Duty®.

Read more at <a href="https://techround.co.uk/news/you-">https://techround.co.uk/news/you-</a> call. Especially in SS. can-now-order-pizza-with-morse-code/

(via Southgate ARC)

CWT SO<sub>2</sub>R Operations with Dueling CQs and **Interleaved QSOs** 

From: Bud Trench

Date: Fri, 05 Nov 2021 15:13:46 EDT

I put together a short video of the first ten minutes of the 13z CWT on 11/3/2021. The video is intended to demonstrate SO<sub>2</sub>R operations featuring dueling COs and interleaved OSOs. Rates during the 10 minute period peaked over 400 / hour. I hope you find it entertaining!

https://www.youtube.com/watch?v=5HxsyBjjUi Q

**73**, Bud AA3B

Check out who's one of the first stations that Bud contacts.

Re: How do you operate CWTs?

From: K9MA

Date: Fri, 05 Nov 2021 15:39:58 EDT

One of the great things about CWT operators, almost without exception, is how they handle

busted calls. If someone busts my call, I send a correction with the exchange and ALWAYS get an acknowledgement, so I know my call is correct in the log. This is so consistent in CWT's that one gets spoiled. Alas, in other contests, especially DX code, with each code correlating to a specific pizza contests, you really can't count on getting the ack, unless you withhold your exchange until you hear your call come back correctly. Virtually every time I fail to do that, aside from CWT's, all I get back it "TU...." Now, am I in that log, or not? Since I risk the NIL penalty, I will delete the contact. Now the other operator is guaranteed a penalty.

> However, I appreciate it when the other operator does NOT repeat the whole exchange, but just my

> SS is a bit of an exception, since the call is part of the exchange. If copy is good, I'll generally just send the exchange to CWops members and other known "good" operators. The rest will have to get my call right first.

73, Scott K9MA

#### When is a NIL not a NIL

From: Mark N5OT

Date: Sat, 06 Nov 2021 08:55:36 EDT

I saw where Scott KoMA commented on something, demonstrating a common misunderstanding of how QSOs are crosschecked in many contests. I would like to straighten that out, but be warned, it will stand some of vou on your ear. Scott said "Since I risk the NIL penalty, I will delete the contact."It turns out, Scott is most likely not risking the NIL penalty. Let's set up a hypothetical where Scott K9MA is describing a QSO with DX1OP. Scott works DX1OP but DX1OP comes back to K9MR. Scott corrects it. DX1OP does not ack the correction. Scott's fear is that DX1OP actually logs a QSO with K9MR not K9MA, even though Scott did his personal due diligence to correct DX1OP when he came back to K9MR, but DX1OP was a bonehead and failed to understand he screwed up.

You with me so far? Actually, what really happens if Scott turns in his log showing the above QSO with DX1OP are these following two possibilities:

- 1) DX1OP does not send in his log. RESULT: Scott does not get a NIL.
- 2) DX1OP sends in his log showing a QSO with K9MR. RESULT: DX1OP gets a BUST (not a NIL) but Scott is not penalized just because DX1OP messed up.

When only one guy turns in the log, the checkers don't have enough info to know if a mistake was made. When the log checkers do have the data on the QSO from both sides, they can tell who messed up and act accordingly. In the above case, it's obvious to the log checkers that DX1OP miscopied Scott's call, resulting in a busted QSO on DX1OP's part, not Scott's part. DX1OP gets the BUST.

There are other ways this might play out:

- A) Scott takes the QSO out of his log. Then Scott doesn't get credit for the QSO with DX1OP (painful especially if DX1OP was a multiplier!) but DX1OP does not get penalized in any way for busting Scott's call. DX1OP's QSO with K9MR stands.
- B) DX1OP was actually working another guy who happened to be K9MR all along. If K9MR does not turn in a log, and Scott did remove the contact from his log, then nobody loses anything. If K9MR does turn in a log AND K9MA also turns in his log showing a QSO with DX1OP and DX1OP also turns in his log, then Scott gets a NIL.

That one there, B, is the only time Scott would get the NIL in the hypothetical case mentioned above.

The more common mistake that happens is for three stations (not Scott of course, because he's an excellent and diligent operator, and listens before he transmits, copies what is sent, etc) to coincidentally sync up. A station calling CQ gets called by multiple callers. TWO stations decide the CQer came back to them, and send their exchanges on top of each other. This does not end well because the CQing station really only came back to one station. So one of the two is not actually making a QSO. If all three turn in their logs, the signature of this error is 100% obvious.

This is easily avoided by being able to copy the Morse code under the adverse conditions of an intense radio contest, thereby understanding whether the CQing station has come back to you or someone else (and has your call right).

It is gob-smacking how often this mistake is made. Don't assume the CQing guy came back to you based on timing alone. You should only move forward with the QSO if you are certain you are the one he is calling back.

You'd think I would not even have to explain that but unfortunately I do. Being a CQer, I hear this all the time, and I feel bad for the poor sap who only thinks I am working him but I'm not.

So - on a positive note - Be Safe Out There - this weekend is Sweepstakes! The more unique info there is in an exchange, the easier it is to make operating and logging mistakes - which is the unexceeded joy of SS - The log checkers get to cross-check a number, a precedence, a check and a section in addition to a callsign, a frequency band and a time! It's enough to give KR2Q a deleted an exciting day of data mining. 100% of all of that has to line up in order for that QSO to pass.

Germane to the conversation about allowing a computer file to feed you all that data - pay attention here - sometimes the data in the computer file is wrong. YOU are the operator and it is up to you to log the QSO right. Let's say W6AQ is sending 71 OK instead of 55 CA. There is a whole list of operators who will turn in logs with 55 CA. Those operators deserve a visit by the Wouff Hong and an escort down the Walk of Shame. Those guys get what I would call "an unfortunate reputation."

Don't be one of those guys. And of you're not a guy please forgive my sexist language in this case. same time you get your knickers in a twist. Some

All in the interest of better contesting,

73 - Mark N5OT

On 2021-11-05 2:39 PM, K9MA wrote:

One of the great things about CWT operators, almost without exception, is how they handle busted calls. If someone busts my call, I send a correction with the exchange and ALWAYS get an acknowledgement, so I know my call is correct in the log. This is so consistent in CWT's that one gets spoiled. Alas, in other contests, especially DX contests, you really can't count on getting the ack, unless you withhold your exchange until you hear your call come back correctly. Virtually every time I fail to do that, aside from CWT's, all I get back it "TU...." Now, am I in that log, or not? Since I risk 1) to copy what is sent not what is in the pre-fill the NIL penalty, I will delete the contact. Now the file other operator is guaranteed a penalty.

However, I appreciate it when the other operator does NOT repeat the whole exchange, but just my call. Especially in SS.

SS is a bit of an exception, since the call is part of the exchange. If copy is good, I'll generally just send the exchange to CWops members and other known "good" operators. The rest will have to get my call right first.

73, Scott K9MA

Re: When is a NIL not a NIL

From: Mark N5OT

Date: Sat, 06 Nov 2021 09:34:09 EDT

ANOTHER common misunderstanding is that you have to delete one or the other QSOs when this happens, and then you worry about whether DX1OP also deleted the same one or the other

one. Or whatever. Makes your head spin at the people think that unless both stations delete the same one then both stations might get the dreaded NIL.

The best practice is to leave all those OSOs in the log, because the log checkers are smart enough to reverse-engineer that what really happened is what Zack was talking about - a QSO failed unknowingly the first time, but was successful the second time. You only get BUSTs (and sometimes NILs) when one call NEVER shows up on the other station's log. If it does show up in both logs at any point then you both get credit for having made a QSO even if the times don't match up.

For many many years there has NOT been any kind of penalty against DUPES. Log them.

So the over-arching rules are:

2) leave dead QSOs in the log, and also log the second QSO even if one or the other of you really wants to say "worked before."

Believe me, those log checking guys are light years ahead of mere mortals. A well kept secret that should be obvious (Doug would know it though) - in many contests they have so much data they can almost completely reconstruct the log of a station that got on for the contest but didn't turn in a log. Are you kidding me? Those guys are very smart.

73 - Mark N5OT

Re: When is a NIL not a NIL

From: Pete Smith

Date: Sat, 06 Nov 2021 09:43:08 EDT

Well, ves, so long as the DX objects, but I hope he/she doesn't - just work me again, and no harm no foul. My biggest pet peeve in this area is the person who insists that it's a dupe and \*won't\* work me again, perhaps out of ignorance of the current dupe rule

73, Pete N4ZR

\_\_\_\_\_

#### Re: When is a NIL not a NIL

From: Douglas Zwiebel

Date: Sat, 06 Nov 2021 10:16:12 EDT

Interesting reading. RE: Pete's comment about "current dupe rule." OMG...this "no penalty for dupes" rule (at least for CQWW) has been "current" for decades. You either have to be a real is that right? OT who doesn't read the "current" rules and anyone else who doesn't read the rules. RTFR! RTFR! And for CQWW, also read the Wednesday, an SDR. It's to the rule of the rules of the RTFR! RTFR! And for CQWW, also read the RTFR! RTFR! RTFR! And for CQWW, also read the RTFR! RTFR! RTFR! And for CQWW, also read the RTFR! RTFR! RTFR! And for CQWW, also read the RTFR! RTFR! RTFR! And for CQWW, also read the RTFR! And for CQWW, also read the RTFR! RTFR

de Doug KR2Q

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#### Re: When is a NIL not a NIL

From: Dave K1VUT

Date: Sat, 06 Nov 2021 10:53:23 EDT

Two observations...

About 3 years ago, I called a well known contest operator in SS CW (whose call I forget). I was told "QSO B4". I replied "No", he still refused to work me. His loss, I am sure he was docked a QSO and possibly a penalty. How do I know he was docked? My copy of N1MM told me he wasn't a dupe. Now one might say that I had mistakenly logged his call as something else, but like Scott, I am one of those very careful CW operators who makes sure he is copying and logging correctly. Therefore I never ... well, maybe never... well, usually don't ... well, sometimes make mistakes.  $\Box$ 

By the way Mark, you should fix your Call History File. I believe Jim N3JT will respond "QSL Jim 1", not "Jim 3". □□□

Good points in these email messages. They also give us something to do while we are waiting for 2100z.

73, Dave K1VUT

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#### Fastest SO1R CWT?

What's the fastest possible SO1R (or SO2R) in the CWTs? 190s for SO1R and 300+ for SO2R? The potential has been reported at 750 unique operators are on the air at any given CWT session, is that right?

Here is my best result so far, from PJ2 last Wednesday, 13Z. Recorded from Europe, using an SDR. It's the full hour and it's ~150 Qs.

Running split power with one Yagi on Europe and another on USA.

Listen here: http://kl2a-

7.blogspot.com/2021/11/1-hour-cwt-recording-

of-pi2kl2a-1300z.html

Just for fun... GL in the contest!

73 KL2A





### Capers: Swap and Shop CARA Swap & Shop Policies:

CARA assumes no responsibility for transactions made or inaccuracies in ads. You are responsible for checking your ad and notifying us of any corrections. Swap and Shop listings are open to licensed CARA the CARA Capers.



### **Member and Station News:**

Your news or story could be included here in the next

Just snap a pix of your station, antennas, mobile installation, etc. and send it in!

### **POTA Activations Are Easy** and Fun

by Jim Ritterbusch, WO4X

December 5, 2021

I listened intently to the descriptions of their Parks On The Air (POTA) activations by John Morelli, W1JGM, and Ron Willson, N1IBQ, as they spoke in the last CARA meeting. I have always been fascinated by portable operations, especially those in the outdoors, ever since observing my first Field Day in 1993, just before getting licensed.

I was further intrigued by a member of my now-local club discussing his plans for a hams, based on space available. Please submit POTA activation in nearby Bath County. I your items to w1qk@snet.net for placement in decided that this was something I had to do. I figured I had the necessary elements to pull it all together – an IC-706 Mk2g, a deep-cycle 12v battery, MFJ manual tuner, a wire dipole cut for 40 meters. I elected paper logging, (which I transposed the next day to N1MM with a user-defined-contest overlay).

The POTA system has pre-authorized State and National Parks, which you can search at https://pota.app/#/map. I selected Natural Bridge State Park in Virginia, only issue of CARA Capers. Contact W1QK, Capers editor. about 15 miles from my home. I called the Park Ranger the day before to ensure there were no restrictions on throwing a wire antenna up into the trees. Being unfamiliar with the entire park area, I asked his assistance in choosing a location with trees and parking. There was a \$5 fee to park all day.

I picked December 4, 2021 as the last day of unseasonably warm weather. It was ideal conditions, and even with only a sweatshirt, I remained comfortable.

Upon arriving, I surveyed for the best spot to set up my antenna with trees at least 66 feet apart, with a flat spot near the middle to set up my operating table and chair. Uncoiling my antenna, imagine my surprise when I found 3 elements instead of 2! Eureka, what I had was a wire vertical with 2 radials, not a dipole. Reconsidering my installation, I found a suitable tree close enough to 33 feet high, and it had a picnic bench close enough. I cast a fishing line with a 2-ounce weight over the tree, pulled up the element, and stretched the verticals out across the ground. I set up the equipment on the picnic table, with a short ladder-line feeding to the tuner.



The scowl in the photo was due to the sun glare blinding me from my phone screen

Because of this being a last-minute decision, I did not leave a lot of time to operate. I figured 2 hours would make or

break it. I found a clear frequency and called CQ Parks On The Air. Using my cell phone, I self-spotted on the POTA App (where *self-spotting is encouraged*). Within a few minutes, I had a pileup! Who would expect a pileup? But I can tell you, it is great fun being on the receiving end for a change.

I operated only SSB – that was more than enough to keep me busy. Here are some stats:

- Total QSOs 98
- Operating time 105 minues
- Farthest contact Eastern Ontario
- Park-to-park contacts 11
- CARA member contacted Ron Willson, N1IBQ, also operating from a park

I would encourage any hams to try this, whether as a group, a club activity, or an individual. It was great fun!

Editor - Thank you for sharing your story and pix with Capers readers Jim.

Capers welcomes and encourages member input.



The annual State QSO Party Challenge recognizes all radio amateurs' participation in the U.S. State and Canadian Province QSO parties.

It is open to any radio amateur who participates in any of the approved State QSO Parties (SQPs). Participants must simply submit their scores to 3830Scores.com to be included in the Challenge.

Participants are recognized for reaching five levels of achievement – Bronze, Silver, Gold, Platinum and Diamond.

Using the submissions to 3830Scores.com, each callsign's cumulative score is calculated by totaling up his/her number of reported contacts and multiplying by the number of SQPs entered year-to-date.

The use of the number of SQPs entered as a multiplier is to encourage radio amateurs to enter more state/province QSO parties.

The use of the number of contacts as a metric is to encourage participants to operate longer in each SQP, increase the effectiveness of their station and improve their contesting skills.

To qualify for an award level, the participant must have participated in at least two State QSO Parties.

Each State QSO Party entry must have at least two QSOs. The first SQPs of most years are the Vermont, Minnesota and British Columbia QSO Parties on the first weekend of February.

In 2021, the State QSO Party Group is offering even more exciting awards/activity programs. It includes the State QSO Party Challenge, which is similar to the 2020 SQP Challenge competition AND the new Worked All QSO Parties (WAQP) awards program.

**Source:** http://stategsoparty.com/

### Special Summary: State QSO Party Challenge -2021 YTD

#### Source:

https://www.3830scores.com/sqpsummary.php

Operator Call Total Points Total QSOs Total QPs Cumulative Score

K5CM 2,423,660	) 15662 <mark>45</mark>	704,790
W0BH 1,386,164	1 10087 <mark>45</mark>	453,915
K9RS 1,255,086	6 7886 <mark>45</mark>	354,870
N8II 1,329,590	) 7814 <mark>45</mark>	351,630
KI6RRN 1,641,4	73 7727 <mark>45</mark>	347,715
AA4TI 1,976,014		340,470
OM2VL906,581	5816 <mark>45</mark>	261,720
K4BAI 1,011,434	6245 39	243,555
KV0I 527,987	5317 <mark>45</mark>	239,265
AA1SU 557,968	5124 <b>45</b>	230,580
7.1.7.00 007,000	0,2,	200,000
AC0W640,102	5351 39	208,689
W0PI 634,763	4225 <mark>45</mark>	190,125
NS2N 650,742	4271 42	179,382
AD4EB 2,829,16	61 9786 18	176,148
W1QK 456,701	3896 45	175,320
W3LL 382,305	3944 43	169,592
W9QL 416,517	3732 <mark>45</mark>	167,940
K8MR 1,767,049		159,300
, ,		,
K9CW516,331	3417 45	153,765
K0PC 508,454	<i>3538 43</i>	152,134



The "Worked All QSO Parties" awards (WAQP) program is administered by the State QSO Party Group and it is sponsored by Icom America.

These awards are available to all licensed amateur radio operators who meet the specified award requirements.

To qualify, all applicants must adhere to the State QSO Party Challenge AND WAQP program rules. Awards include certificates for participating in at least 50% of the SQP North Dakota QSO Party Challenge approved contests with a goal of participating in ALL of the approved contests.

New Mexico QSO Party New York QSO Party North Carolina QSO Party Ohio QSO Party Oklahoma QSO Party

The WAQP requires that the operator submit a log with at least TWO valid contacts to the contest manager in addition to the 3830scores.com scores submission.

"The purpose of the State QSO Party group is to be the catalyst to take state QSO party contesting to the next level."

#### 45 Approved Contests

7th Call Area QSO Party Alabama QSO Party Arizona QSO Party Arkansas QSO Party British Columbia QSO Party California QSO Partv Colorado QSO Party Delaware QSO Party Florida QSO Party Georgia QSO Party Hawaii QSO Party Idaho QSO Party Illinois QSO Party Indiana QSO Partv Iowa QSO Party Kansas QSO Party Kentucky QSO Party Louisiana QSO Party Maryland/DC QSO Party Michigan QSO Party Minnesota QSO Party Mississippi QSO Party Missouri QSO Party Nebraska QSO Party

Nevada QSO Party New England QSO Party New Hampshire QSO Partv New Jersey QSO Party New Mexico QSO Party New York QSO Party North Dakota QSO Party Ohio QSO Partv Ontario QSO Party Pennsylvania QSO Party South Carolina QSO Party South Dakota QSO Party Tennessee QSO Party Texas QSO Party Vermont QSO Party Virginia QSO Party Washington State Salmon Run West Virginia QSO Party Wisconsin QSO Party



# Visit us on the Web at <a href="http://www.cararadioclub.org">http://www.cararadioclub.org</a>

#### **Executive Board:**

President – Bud Kozloff, W1NSK w1nsk@hotmail.com Vice President – John Morelli, W1JGM w1jgm@aol.com Secretary – Gary Adams, N1GSA Mrclipper69@yahoo.com Treasurer – Gregory Davis – WR1Z ggdavisct@gmail.com

#### **Directors:**

Harlan Ford, W1QH - hford01@snet.net David Coelho, WA1JGA -davidcoelho52@gmail.com Vacant Director Position

CARA is an IRS 501(C)3 Organization.
Consider supporting CARA in your estate planning.

CAPERS is the monthly newsletter of the Candlewood Amateur Radio Association Editor: Dan Fegley, W1QK w1qk@snet.net



This summary is reprinted as a courtesy of: The Mahoning Valley Amateur Radio Association's

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This summary is reprinted as a courtesy of: The Mahoning Valley Amateur Radio Association's Award-Winning monthly newsletter: "Voice Coil" <a href="http://www.mvara.org/Newsl/Current.pdf">http://www.mvara.org/Newsl/Current.pdf</a>

#### A brief word from our editor ...

CARA CAPERS is the monthly publication of the Candlewood Amateur Radio Association, Inc. (CARA) and is intended to present news, issues, and opinions of interest to CARA members and the Amateur Radio Community.

We encourage contributions of articles, letters to the editor, etc. and welcome newsletter exchanges with other clubs from around the country and around the world. Permission is granted to reprint material contained herein as long as proper credit is given to this newsletter and the author.

Ideas for, and contributions to the CAPERS should be submitted to: w1qk@snet.net.

Submissions must be received no later than the date indicated in the preceding month of issue, *unless otherwise specified*.

Submissions should be in MS Word format or ASCII text. Photos should be in .jpg format.

The input deadline is announced in the previous issue and again at the monthly planning meeting.

Material received after the deadline will be used in the next month's CAPERS if it's still current and /or newsworthy.

The CAPERS is published by CARA Capers Editor. All material contained herein is considered the opinion of the author and not necessarily that of CARA.

Announcements of events are for informational purposes and do not necessarily constitute an



#### About ARRL:

Founded in 1914 by Hiram Percy Maxim, ARRL (American Radio Relay League) is the national association for Amateur Radio in the US. Today, with more than 161,000 members, ARRL is the largest organization of radio amateurs in the world. ARRL's mission is based on five pillars: Public Service, Advocacy, Education, Technology, and Membership.

#### ARRL -- Your One-Stop Resource for Amateur Radio News and Information

- Join or Renew Today! Eligible USbased members can elect to receive <u>QST</u> or <u>On the Air</u> magazine in print when they join ARRL or when they renew their membership. All members can access digital editions of all four ARRL magazines: <u>QST</u>, <u>On the Air</u>, <u>QEX</u>, and <u>NCJ</u>.
- Listen to <u>ARRL Audio News</u>, available every Friday.

#### Subscribe to...

<u>NCJ -- National Contest Journal</u>.
 Published bimonthly, features articles by top contesters, letters, hints, statistics, scores, NA Sprint, and QSO parties.

**QEX** -- A Forum for Communications **Experimenters.** Published bimonthly, features technical articles, construction projects, columns, and other items of interest to radio amateurs and communications professionals.

#### Free of charge to ARRL members...

- public service and emergency communications news), the ARRL Contest Update (biweekly contest newsletter), Division and Section news alerts -- and much more!
- Find ARRL on Facebook! Follow us on Twitter and Instagram!



### **Three-Way Races for Director** Set in New England and **Roanoke Divisions**

08/26/2021

ARRL members in the New England and Roanoke Divisions will choose among three candidates running for Director in each Division. The candidates include two incumbents. Those are the only contested races in this year's election cycle for Director and Vice Director.

In the New England Division, the candidates for Director are the incumbent, Fred Hopengarten, K1VR, of Lincoln, Massachusetts; Tom Frenaye, K1KI, of West Suffield, Connecticut, and Fred Kemmerer, AB1OC, of Hollis, New Hampshire.

New England Vice Director Phil Temples, K9HI, of Watertown, Massachusetts, was uncontested and has been declared elected.

Full ARRL members of the New England and Roanoke Divisions who are in good standing as of September 10, 2021, will receive a ballot. Ballots will be mailed to members no later than October 1, 2021. Completed ballots must be received at the designated PO Box in the envelope provided by Subscribe to the ARES Letter (monthly noon Eastern Time Friday, November 19, 2021.

> **ARRL Web site** <memberlist@arrl.org> Fri, Nov 19 at 5:53 PM SB QST @ ARL \$ARLB027

### ARLB027 ARRL Announces **Director Election Results**

ZCZC AG27 OST de W1AW ARRL Bulletin 27 ARLB027 From ARRL Headquarters Newington CT November 19, 2021 To all radio amateurs

SB OST ARL ARLB027 ARLB027 ARRL Announces Director Election Results

The ARRL New England and Roanoke Divisions will have new Directors on January 1. The results of these three-way contested elections for Director were announced on November 19, after ballots were tallied at ARRL Headquarters.

In the New England Division, incumbent Fred Hopengarten, K1VR, received 1,054 votes, past Director Tom Frenaye, K1KI, received 1,026 votes, and challenger Fred Kemmerer, AB1OC, received 1,147 votes. Mr. Kemmerer was declared the winner.

All newly elected officials take office at noon on January 1, 2022.

**NNNN** /EX

### ARLB027 ARRL Announces **Director Election Results**



Fred Kemmerer, AB10C



#### **Bud Kozloff via**

**CARA** <cara@cararadioclub.org>Unsubscribe To:cara@cararadioclub.org Sat, Nov 20 at 10:15 AM

All,

Congratulations to Fred Kemmerer, AB1OC, for being elected as the ARRL New England Director for 2022-2023.

Bud - W1NSK **CARA** President





Editor: Rick Lindquist, WW1ME **December 2, 2021** ARRL Author, QST Technical Newly elected ARRL New England Director - Editor Joel Hallas, W1ZR, SK



Retired QST Technical Editor Joel R. Hallas, W1ZR, of Westport, Connecticut, died on November 25. An ARRL member, he was 79. Hallas retired in 2013 but remained active as a contributing editor, handling the popular "The Doctor is In" column in QST and the podcast of the same name.

He had been a radio amateur since 1955.

"Joel was not only brilliant, he shared that brilliance with the ham radio community in a way that taught innumerable hams things

they needed to know in order to experience success and enjoyment," said ARRL Publications and Editorial Department Manager Becky Schoenfeld, W1BXY. "He was a fine mind, a generous mentor and colleague, and a consummate gentleman. He will be missed."

Retired ARRL Publications Manager Steve Ford, WB8IMY, recalled Hallas as "an iconic figure in amateur radio media as a prolific author of *QST* articles and ARRL books, and even in the audio podcast community. I greatly enjoyed being Joel's sidekick for the popular 'Doctor is In' podcast. He had a wry sense of humor both on and off the microphone and a remarkably stoic attitude toward the illness that would eventually claim his life."

Hallas authored six books about communications technology, published by ARRL. His titles include Basic Radio; Basic Antennas; The ARRL Guide to Antenna Tuners; Hamspeak; The Care and Feeding of Transmission Lines; Understanding Your Antenna Analyzer, and The Radio Amateur's Workshop.

Hallas earned his bachelor's in electrical engineering from the University of Connecticut and an MSEE from Northeastern University. He previously had worked for Raytheon as a radar systems engineer and for GTE as a nuclear weapons effects (electromagnetic pulse) analyst and as a satellite and terrestrial communications systems engineer, as well as for IBM and AT&T. He also taught at the college level.

He enjoyed sailing, as described in the July 2009 issue of *QST*. He and his 24-foot sloop *Windfall* -- fully equipped with a ham station that used the insulated backstay as an HF antenna -- graced the front cover.

Survivors include his wife of 58 years, Nancy, W1NCY.

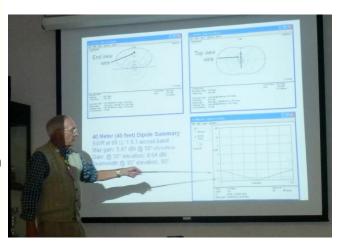
### Joel Hallas – W1ZR (SK): Friend to CARA. de W1QK

Joel Halas – W1ZR, graciously offered his time to give several technical presentations to our club.

He described his "Skelton Sleeve" coupled resonator antennas at our combined CARA/YCCC meeting in October 2018, with many CARA and YCCC members in attendance.

He also kindly assisted me with some technical information about two 15 Meter antennas at my station.



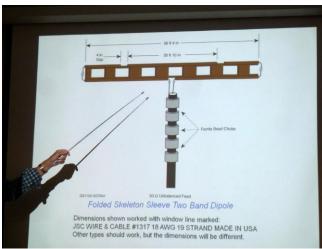




Source: www.QRZ.com

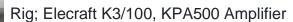


JOEL R HALLAS 54 COLONY RD WESTPORT, CT 06880 USA





Amateur radio operator since 1955. Former calls W1KZR and DL5HK (1962-1965, US Army). Awards; DXCC (291), 5BDXCC, DXCC-CW, DXCC-Phone, WAC, WAS, CP-30.



Antennas; 135 ft Center-fed Zepp up 70 ft, 80 m groundplane, 20/15/10 3 el tribander plus 3 el 6 meter coupled resonator add-on, 17/12 meter coupled resonator dipole and 4 el 2 meter Yagi.

Professional life; Electrical Engineer by training (BSE,U'Conn '69; MSEE. Northeastern Univ '73). Retired engineering manager, telecom executive and college teacher.

Worked for ARRL as QST Technical Editor until retirement in 2013. Now QST



Contributing Editor, answering member tech questions and preparing the award winning monthly QST column "The Doctor is IN." Author of Basic Radio, Basic Antennas, The ARRL Guide to Antenna Tuners, Hamspeak, Care and Feeding of Transmission Lines, Understanding Your Antenna Analyzer and The Radio Amateur's Workshop; all published by ARRL.

73, Joel

Rev: W1ZR - Dec 8, 2019

ARRL is developing a whole suite of new podcasts and other media, like the new magazine "On the Air" http://www.arrl.org/onthe-air-magazine

Also, I suspect Joel Hallas has some health issues that make it difficult to do regular podcasts. He skipped several episodes a short while back and mentioned health issues.

But they say that Steve Ford will be hosting a new podcast in the New Year and that Joel Hallas will be on some episodes. :) I enjoyed it and thought they had something there.

#### Source:

https://www.reddit.com/r/amateurradio/comm ents/ecw5h5/the doctor is in podcast endi na/



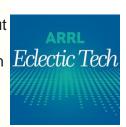
# **ARRL Podcasts** Schedule

On the Air The latest episode of the On the Air podcast (Episode 23) features an in-depth discussion of Q-signals, along with several on-the-air

examples.

The latest edition of the Eclectic Tech podcast (Episode 48)

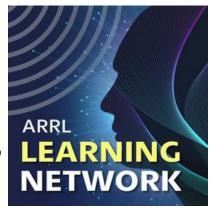
features a conversation about the technical aspects of the 1921 Transatlantic Tests with Eclectic Tech Clark Burgard, N1BCG. We also chat about on-air activities surrounding the upcoming anniversary.



The On the Air and Eclectic Tech podcasts are sponsored by Icom. Both podcasts are available on iTunes (iOS) and Stitcher (Android) as well as on Blubrry -- On the Air | Eclectic Tech.

### **ARRL Learning Network** Webinars

Visit the ARRL Learning Network (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions.



### More webinars are coming soon!

ARRL members may register for upcoming presentations and view previously recorded Learning Network webinars. ARRLaffiliated radio clubs may also use the recordings as presentations for club meetings, mentoring new and current hams, and discussing amateur radio topics.

The ARRL Learning Network schedule is subject to change.

# Now You Know!: Phil "Gil" Gildersleeve, W1CJD

By ARRL News Editor: S. Khrystyne Keane, K1SFA

Longtime readers of QST will certainly remember the cartoons of Phil Gildersleeve, W1CJD (ex-1ANE). Known affectionately as "Gil," he drew more than 1500 cartoons for the ARRL, many of them appearing on the pages of QST.



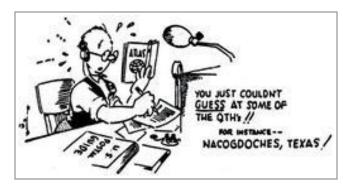
Gil's QSL card.

Gil started cartooning for the ARRL back in June 1927. His characters -- such as Jeeves the Butler and the gang at the Podunk Hollow Radio Club -- became old friends to readers of QST. Gil's first Jeeves cartoon was published in February 1940: From the other room comes his master's voice, saving. "Jeeves, come here and help me look for DX!" Jeeves, not really sure what exactly DX is, comes on the run with a road map, a telescope, binoculars, a lantern, a compass and a butterfly net in hand! As a native of the great state of Texas, my favorite Jeeves cartoon shows him trying to push a giant QSL. The next month, Gil drew a single panel card (from Texas, of course!) through the door -- the card can barely get through. Of course, things are bigger in Texas!

If you ever tour ARRL Headquarters, you can see a large version of this cartoon in the second floor hallway.

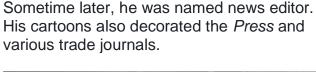
The mythical Podunk Hollow Radio Club depicted the idiosyncrasies of a group of radio enthusiasts getting together. The cover for the June 1964 issue of QST shows the Podunkers -- hundreds of them -- happily camped out in a forest setting. In the large tent in the rear, several hams are operating their radios. In the foreground, several more are chatting up a couple of attractive girls in a convertible, little cartoon hearts fluttering over one ham's head. And off to the far right, the Department of Conservation is beginning to set up their blasting apparatus with its accompanying signs of "Turn off all two-way radios!"

But Gil also used his cartoons to teach proper on-the-air behavior.



In March 1938, he drew an eight-panel cartoon of a man calling CQ on CW. Each panel had the man getting older, whereby the seventh panel, he was old, bald and with a long beard, spider webs all around. The last panel showed a tombstone that read "Here lies C. Q. McGall. He died without even signing his call."

cartoon with a line separating the panel into two parts. In the first part, he showed a radio amateur "all worn to a frazzle" from handling so much traffic, as well as dealing with QRM. The second half showed two amateurs handling traffic as a team, "all full of vim and vigor." Gil's point was spot-on: "Cooperative operating does a better job with greater efficiency all around. Instead of harassed, inefficient, overworked operators, put key stations on a 6 or 8 hour basis, with relief and second operators for efficiency during intensive operation."









THINGS SHOULD ALL BE CHECKED OUT



Gil's interests were not limited to ham radio. A native of Portland, Connecticut, he began working for the *Middletown* (CT) *Press* as the Portland correspondent in 1940, became county editor in 1943 then city editor in 1945.

He served in the volunteer fire company and was captain of Fire Company No 2 for nine years, as a member of the Portland Board of Education for eight years, and as a vestryman in his local church.

In 1966, he was chairman of Portland's 125th anniversary celebration.



Now you know!

As part of the celebration, he drew the town seal, depicting a number of elements of historical Portland. Foremost is an old-time oxen driver with his team, pulling a large brownstone sling; the greater part of Portland's 19th century wealth came from the brownstone industry.

To the left of the oxen is a small building like those visible in old pictures of the quarries. Its tall chimney is smoking, connoting industry.

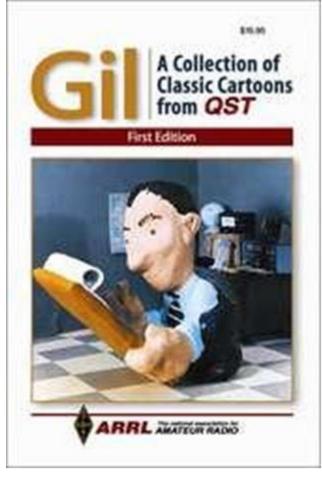
To the right is another such building atop the quarry wall with a pulley for lowering things into the quarry.

Gil passed away on November 4, 1966.

"His work became a tradition," wrote former QST Managing Editor Laird Campbell, W1CUT (SK) in the foreword of Gil: A Collection of Classic Cartoons from QST.

"His knack for expressing ideas, feelings or situations unique to Amateur Radio was, and still is, unexcelled.

[He] could take a rudimentary idea and turn it into a final masterpiece through the uncanny strokes of his pen. Gil's creations will never be forgotten...his conceptions remain alive in the minds of both old-timers and newcomers to Amateur Radio."





2A

Radio Amateurs of Northern Vermont W1NVT (+W1PU) 4,945 2 16 15,900 VT

Muskogee ARC K5CM (+KK5I) 3,047 2 8 13.110 OK

Newport Co. RC NE1RI (+W1SYE) 3,385 2 40 12,482 RI

Greer ARC K4SV 3,098 2 14 10,012 SC

MSU ARC, Magnolia ARC, Lowndes Co. ARC, MFJ ARC W5YD (+K5MFJ) 2,288 2 30 9,418 MS

McHenry Co. Wireless Assn. K9RN (+KA9CAR) 2,020 2 16 8,848 IL

Tom's Garage ARC N6MI (+N7DA) 2,358 2 7 8,774 SB

CTRI Contest Group KE1S 2,204 2 9 8,526 CT

Minnesota Wireless Assn. NØAT 1,687 2 14 8,198 MN

Mountain AR Contest Org. N4NX (+W4IZT) 1,548 2 7 7,544 GA

Cape Fear ARS K4MN (+KF4JDR) 1,900 2 25 6,800 NC

Berger's Bandits RC K3II 1,689 2 5 6,682 EPA

W/K ARC of Greater Milwaukee W9I 1,344 212 6,600 WI

Wisconsin River Gang W9AV 1,570 2 3 6,520 WI

Williamsburg Area ARC K4RC (+AI4WU) 1,702 2 58 6,360 VA

Mountaineer ARA W8SP 1,487 2 21 6,246 WV

Nashoba Valley ARC N1NC (+WU3C) 1,271 2 22 6,142 EMA

Greater Norwalk ARC N1EV 1,474 2 21 6,046 CT

Trojan ARC NWØK 1,216 2 5 5,800 KS

Montrose Co. ARC KØIIT (+KCØQXX) 1,194 2 67 5,540 CO

Rochester (MN) ARC KØT 1,422 2 27 5,504 MN

Alamance ARC N4MIO 1,234 2 6 5,222 NC Big Bend ARC K5FD (+N5CET) 1,320 2 9 5,166 WTX

Central Oregon DX Club N7LE (+N7XU) 1,343 2 14 5,054 OR

First State ARC K3F 1,062 2 23 5,052 DE

Reelfoot ARC K4RFT (+N4MJ) 808 2 9 5,014 TN

Crawford ARS W3MIE (+N3QQH) 1,125 2 25 4,936 WPA

Monroe Co. Radio Communications Assn. W8PI (+W8DWL) 1,288 2 21 4,716 MI

Carbon Co. DXCC N7W 1,083 2 8 4,510 WY

Massillon ARC W8NP (+KC8WVH) 879 2 43 4,368 OH

Candlewood ARA W1QI 989 2 14 4,352 CT



