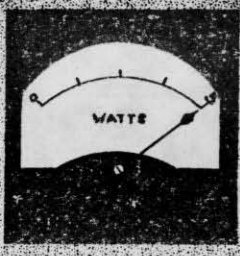


QRP QUARTERLY



OCTOBER 22-23

ANNUAL FALL QRP ARCI QSO PARTY TO HIGHLIGHT OCTOBER OPERATING; C.W. & SSB CONTEST IS WARM-UP FOR OTHER EVENTS LATER IN SEASON

The fall QRP season gets its official kick off the weekend of October 22-23 with the annual QRP ARCI QSO Party.

The event, the rules for which appear elsewhere in this issue, is set to begin at 1200 UTC on Saturday and end at 2400 UTC Sunday.

Contestants are reminded of two important rules: Participants may operate a maximum of 24 hours and contacts in the 10.1-MHz band will be disallowed.

C.W. and sideband contacts are allowed for this event, just as in the April QSO Party. And all entries automatically are considered for the Triple Crowns of QRP Award which will be announced in the next issue of The Quarterly.

REMEMBER: Novice QRPers will be in this contest, too, so set aside a portion of each hour to get in some contacts there. A list of novice frequencies appears in the contest rules, and novices are eligible for the Triple Crowns, too!

This year's contest might be considered a warm-up run for the CQ WW DX contest, set for the weekends of Oct. 29-30 (for phone) and Nov. 26-27 (for C.W.) (See CQ for October for rules.) These contests have a very active QRP section, in case you've never tried them.

Entrants to the QRP ARCI bash are reminded that the highest point category is the less-than-1-watt-output-C.W. field (less than 2 watts out pep), where each QSO is worth 10 points. A resurgence of interest in the milliwatt category occurred last summer when Adrian Weiss, WØRSP, QRP editor at CQ magazine, urged more entries in the milliwatt competition in the ARRL Field Day. Ade traditionally has awarded a FD trophy for mW

activities, and while no such award is available in this fall's QRP ARCI outing, the October contest offers a fine opportunity to test mW gear for later contests.

A decision whether to offer a mW certificate for QRP ARCI contests beginning in 1984 will be based, in part, on the turnout in this fall's event, contest officials said.

And don't forget: All contest entries must be received by Bill Dickerson by Nov. 20, 1983.

THE PRESIDENT SPEAKS

by Ed Popp, K5BOT

October is shaping up to be a busy month for the QRPer.

To start, there is the QRP Forum at the ARRL National Convention to be held in Houston. Also, there will be a hospitality suite where everyone will have a chance to put a face to the voice or fist so often worked and compare notes. During the convention, there will be a Board of Directors meeting for those that are able to attend.

Then, there is the QRP ARCI QSO Party. Details are contained in this issue.

Followed later in the month is STS-9 (Columbia). Launch is currently scheduled for 28 Oct. On board will be Dr. Owen Garritt, W5LFL, who will operate on 2 meter FM when time and schedule permit.

QST has posed a question, "What will be the lowest power used to make contact with W5LFL?"

Continued on Pg. 4

Journal of the QRP Amateur Radio Club International.

October, 1983. Vol. XXI, No. 4



QRP Quarterly is the official journal of the QRP Amateur Radio Club, International, Inc., and is published four times a year; January, April, July and October. The QRP ARCI is a non-profit organization dedicated to increasing world-wide enjoyment of QRP operation and experimentation (QRP, as defined by the Club, is 5 watts output CW, and 10 watts output PEP).

Current Club membership is _____. QRP Quarterly circulation is 710. The initial membership fee of \$6.00 (\$7.00 for DX applicants) covers lifetime membership plus the first four issues of the Quarterly. Membership information is available from the Sec/Treas. (see below). Subscription renewals are \$5.00 (\$6.00 for DX subscribers) for four issues. Expiration Notice appears in red (rubber stamp) on the mailing cover of the final issue. Expiration date also appears on the mailing label following QRP Number; i.e. 4174-4/83 means member 4174's subscription expires with the 4th quarter (Oct.) 1983 issue. Renewals must be received by the Sec/Treas. by the 15th day of the month prior to the month of publication for continuous service. Otherwise, renewal begins with the next issue. Send renewal notices, changes in call or address to the Sec/Treas. (see below). PLEASE MAKE ALL CHECKS OR MONEY ORDERS PAYABLE TO: QRP Amateur Radio Club, International, Inc. PLEASE DO NOT SEND CASH! New members will receive their first issue following receipt of their application provided it is received at least 15 days prior to the month of publication. Otherwise, their subscription begins with the next issue. Please include QRP Number and Call on all checks and money orders.

Letters to the Editor are welcome. Not every letter can be published, and the Editor reserves the right to edit letters to conform to space limitations. Those desiring a response from the Editor, Officers or Directors should inclose a SASE. Construction projects or articles of general interest are always welcome. Manuscripts should be typed, double spaced, and all circuit diagrams should be clear and should include all parts values. The Editor and Club are not responsible for testing projects appearing in the Quarterly. Pictures should be sharp, distinct, and black-and-white. Size should be around 3" by 3", or a size that can be trimmed to one-column size. Any requests for returned materials must be accompanied by return postage and envelope. Please include name, call, address and phone number on all manuscripts mailed to the Editor.

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Please use this form, or a reasonable facsimile thereof, to renew your subscription or report changes of address or call. Send to the SECRETARY/TREASURER.

() Renewal for ____ yr(s). () Change of Address () Change of Call

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Name _____ New Call _____

Address _____

City _____ State/Province _____ Postal Code _____

Country (if DX Subscriber) _____



QRP AMATEUR RADIO CLUB INTERNATIONAL
FALL QSO PARTY

DATES: 1200 UTC Saturday, Oct. 22, 1983, to 2400 UTC Sunday, Oct. 23, 1983. Participants may operate a maximum of 24 hours.

EXCHANGES: Members give RS(T), state/province/country and QRP ARCI membership number. Non-members give RS(T), state/province/country and power output.

Stations may be worked once per band and mode for QSO multiplier credits. For example, the same station may be worked on 40-meter c.w. and sideband for credit. Each member contact counts 5 points, regardless of location. Each non-member U.S. or Canadian contact counts 2 points. Non-member stations other than W/VE count 4 points.

MULTIPLIERS: 4 to 5 watts output c.w. or 8 to 10 watts output pep x 2.
3 to 4 watts output c.w. or 6 to 8 watts output pep x 4.
2 to 3 watts output c.w. or 4 to 6 watts output pep x 6.
1 to 2 watts output c.w. or 2 to 4 watts output pep x 8.
Less than 1 watt output c.w. or 2 watts output pep x 10.
More than 5 watts output c.w. or 10 watts output pep will be counted as check logs only.

BONUS MULTIPLIERS: If 100 percent natural power (solar, wind, etc.) with no storage, x 2. If 100 percent battery power, x 1.5.

SCORING: QSO points (total all bands) times total number of states/provinces/countries (a s/p/c may be worked on more than one band) times power multiplier times bonus multiplier (if any) equals claimed score. Send a large s.a.s.e. or IRCs to contest chairman for scoring summary sheet in advance of contest.

SUGGESTED FREQUENCIES: For c.w. 1810, 3560, 7040, 14060, 21060, 28060, and 50360 kHz; for ssb 1810, 3985, 7285, 14285, 21385, 28885, and 50385 kHz; for novices and technicians; 3710, 7110, 21110 and 28110. No 30-meter (10.1 MHz.) contacts will be counted.

CALLING METHOD: CQ CQ QRP DE (call sign) or CQ QRP CONTEST FROM etc.

AWARDS: Certificates to highest-scoring station in each state/province/country with two or more entries. All entries are automatically considered for Triple Crowns of QRP Award.

LOGS: Suggest use of separate log sheets for each band for ease of scoring. Send full log data plus separate worksheet showing details and time(s) off the air. No log copies will be returned. All entrants desiring results and scores please include a large s.a.s.e. with one ounce of U.S. postage or IRCs. It is a condition of entry that the decision of the QRP ARCI contest chairman is final in case of dispute.

DEADLINE: Logs must be received by Nov 20, 1983; logs received after that date or, missing information will be used as check logs. Send all material to:

QRP ARCI Contest Chairman
William W. Dickerson, WA2JOC
230 Mill Street
Danville, Pennsylvania 17821

'TIS TIME TO HOMEBREW

When was the last time the operator at the other end of a QSO told you, "...and the rig here is homebrew at five watts output...?"

Better yet; when was the last time you were able to say that? For the sake of the record, it's been a long time for me, too.

One of the major advantages of QRP is that it lends itself well to homebrewing and experimenting but without massive outlays of cash or the need for costly, sophisticated test equipment.

A quick look through the major Ham Radio magazines will reveal a host of QRP-related articles with relatively easy-to-build pieces of equipment either aimed directly at the low-power enthusiast or readily adapted for QRP. And at least three QRP handbooks are in the final stages of preparation, as this is written.

One of the first excuses heard when the subject of home-brewed gear comes up is, "I can't find the parts." Nonsense! On the next pages you will find a list of 3 dozen companies that sell parts and accessories for the do-it-yourself enthusiast. Most of their catalogs are free for the asking. And since this list is about two years old, others have surfaced in the various radio magazines of late, so look for them.

Most construction articles include p.c. board patterns, and turning out your own is not difficult. However, if you prefer a professionally made board, drop \$1.50 in an envelope to Dynaclad Industries (Box 296, Meadow Lands, Pa., 15347) for a 20-page catalog of boards from articles dating to the 1970s from QST, ham radio, 73, etc. Its boards are well made.

Circuit Board Specialists (at Box 969, Pueblo, Colo. 81002) has a free catalog of complete kits, p.c. boards and spare parts for construction articles that appeared in QST for the most part. Its offerings are well made and regarded.

Want to build your own beam or vertical antenna but can't find the tubing? Drop a card to Don Newcomb, W6DN, at ButterNut Electronics, 405 East Market Street, Lockhart, Texas 78644, and ask for the list of tubing. Don hints he will cut it to length and slot the ends of telescoping sections, if you ask.

OK; Go homebrew it!

--W5QJM

AA2U SETS QUARTER DISTANCE MARK; W6RCP LOGS HIS 200TH MEMBER QSO

By Bill Harding, K4AHK
QRP ARCI Awards Manager

AA2U is the undisputed third quarter distance champion with his 1,595,588 miles per watt contact. Randy worked W4NAN on 15 meters with a 680-microwatt signal.

Terry, K4KJP, picked up another KM/W certificate for a 6-meter QSO with WBOZKG running 37 milliwatts. Terry now has KM/W awards for 40 meters through 23cm. Look for an 80-meter effort next.

Jim, W6RCP, received a "200" seal for his QRP-25 certificate. In checking the log I find only seven "200" seals have been issued in the past ten years.

Carl Smith, W0BJW, says a proposed QRP endorsement to the IARU WAC award is progressing through the several steps required for approval. He is expected to report on the progress of the award at the ARRL convention in Houston, but a final IARU decision is not expected until early 1984.

Meanwhile, the ARRL's board of directors is expected to decide in Houston whether to authorize a QRP endorsement for its DXCC certificate.

A full report on both these awards will appear in the January issue of The Quarterly.

Continued from Pg. 1

This is a chance to show what QRP power levels can do. 5 watts out is the maximum power limit to qualify for QRP levels.

If you plan to try and use QRP levels, state QRP after your call. Some of us should be able to get through. For more details, see July, August, September and October issues of QST.

Speaking of power levels, in August, the FCC has changed the ruling on amateur transmitters from input to output power. QRP ARCI changed to output power over two years ago. How does it feel to be up front? GREAT!

Contained in this issue is a ballot for the Technical Achievement Award. Please take a little

Continued on Pg. 6

QRP ARCI AWARDS SUMMARY SHEET

K4AHK

CALL	DATE	BASIC	ENDORS. - MILES/WATT - NOTES	POWER	MODE	BAND
AD1C	7-30-83	61C		1.5	MIX	MIX
AD1C	7-30-83	62C	ONE MODE	1.5	CW	MIX
KA3CRC	9-05-83	63C	ONE MODE, ONE BAND	3.0	SSB	10m
K9PNG	9-05-83	64C	ONE MODE	2.0	CW	MIX
- DXCC -						
OE1SBA	6-30-83	437C	ONE MODE	2.0	SSB	MIX
AD1C	7-30-83	438C	ONE MODE	1.5	CW	MIX
OZ4LS	9-05-83	439C	ONE MODE, ONE BAND	5.0	SSB	10m
K9PNG	9-05-83	440C	ONE MODE, ONE BAND	2.0	CW	10m
K9PNG	9-05-83	441C	ONE MODE, ONE BAND	2.0	CW	15m
K9PNG	9-05-83	442C	ONE MODE, ONE BAND	2.0	CW	20m
- W.A.C. -						
WB8UUJ	6-30-83	189C	30 STATE SEAL	5.0	CW	MIX
SM5CCT	6-30-83	210C	50 STATES	2.0	MIX	MIX
KA3CRC	9-05-83	211C	40 STATES	3.0	MIX	MIX
N9DHX	9-05-83	212C	50 STATES	2.0	SSB	MIX
OZ4LS	9-05-83	213C	30 STATES	5.0	SSB	10m
K9PNG	9-05-83	214C	50 STATES	2.0	CW	MIX
K9PNG	9-05-83	215C	30 STATES, 2-WAY QRP	2.0	CW	MIX
- W.A.S. -						
W6YMH	6-30-83	956	25 MEMBERS & "50" SEAL #512			
W6RCP	9-05-83	102	"200" SEAL #102			
K9PNG	9-05-83	904	"50" SEAL #513, "100" SEAL #302			
- QRP-25 -						
W6YMH	6-30-83	956	25 MEMBERS & "50" SEAL #512			
W6RCP	9-05-83	102	"200" SEAL #102			
K9PNG	9-05-83	904	"50" SEAL #513, "100" SEAL #302			
- NET -						
K9PNG	9-05-83	20	GLN-80 CERTIFICATE			80m
- 1000-MILE-PER-WATT -						
WA1WLU	6-30-83	834	TO 9Y4BR (2-WAY QRP) 1,146 M/W	2.0	CW 654	15m 294
K4KJP	6-30-83	835	TO W40DW 8,129 M/W	.00155	FM 4	2m 11
KA6SVQ	6-30-83	836	FROM KA9NZI 1,132 M/W	1.5	CW 655	15m 295
KA9OLS	6-30-83	837	TO KA3DCH 1,658 M/W	.400	CW 656	40m 135
G4KKI	6-30-83	838	TO VK2VA 8,454 M/W	1.25	CW 657	20m 206
G4KKI	6-30-83	839	TO WB4AGH (2-WAY QRP) 5,489 M/W	.700	CW 658	20m 207
WD4DSS	7-30-83	840	TO W9GJS 10,361 M/W	.036	CW 659	40m 136
W9GJS	7-30-83	841	FROM WD4DSS 10,361 M/W	.036	CW 660	40m 137
AA2U	7-30-83	842	TO WD4NAN 1,595,588 M/W	.00068	CW 661	15m 296
DISTANCE CHAMP OF THE QUARTER!						
AD1C	7-30-83	843	TO GU3MBS/M 64,320 M/W	.050	CW 662	10m 142
N9DHX	9-05-83	844	TO VK2WU 4,639 M/W	2.0	SSB 133	40m 138
N9DHX	9-05-83	845	TO FB8WG 5,136 M/W	2.0	SSB 134	20m 208
N9DHX	9-05-83	846	TO VK2WU 4,639 M/W	2.0	SSB 135	15m 297
N9DHX	9-05-83	847	TO ZL2AAS 4,100 M/W	2.0	SSB 136	10m 143
VU2SAZ	9-05-83	848	TO VU2ATN 2,362 M/W	.500	CW 663	20m 209
YV6ABM	9-05-83	849	TO W7MCG 2,868 M/W	1.2	CW 664	15m 298
WA1PNQ	9-05-83	850	TO OK3AUI (2-WAY QRP) 2,130 M/W	2.0	CW 665	20m 210
K4KJP	9-05-83	851	TO WB0ZKG (2-WAY QRP) 23,351 M/W	.037	SSB 137	6m 19
VK3KPJ	9-05-83	852	TO KA6EED (2-WAY QRP) 5,289 M/W	1.5	SSB 138	10m 144
SM7HVQ	9-05-83	853	TO KD2X 2,623 M/W	1.5	CW 666	20m 211
OZ4LS	9-05-83	854	TO WA6SYR 2,766 M/W	2.0	SSB 139	10m 145
DE1BMH	9-05-83	855	FROM JY5OL (SWL) 2,242 M/W	1.0	SSB 140	20m 212
K9PNG	9-05-83	856	TO 388FK 4,968 M/W	2.0	CW 667	20m 213

Be a Watt-Watcher; Five or Fewer

table 1. Direct-mail electronic parts dealers.

Active Electronics Sales Corp. P. O. Box 1035 Frammingham, MA 01701 (617) 879-0077	Fair Radio 1016 E. Eureka Box 1105 Lima, Ohio 45802	MAM Electronics Sales 2300 1st Avenue Seattle, WA 98121 (800) 426-0834
ADVA Electronics Box 4181 Woodside, CA 94062 (415) 328-1500	Formula International, Inc. 12605 Crenshaw Blvd. Hawthorne, CA 90250 (213) 973-1921	McGee Radio Co. 1901 McGee Street Kansas City, MO 64108 (816) 842-5092
Alaska Microwave Labs 4335 E. 5th Street Anchorage, AK 99504	Fuji-Sves Enterprise** P. O. Box 40325 Cincinnati, OH 45240 (800) 421-2841 (Nationwide) (800) 421-2877 (Ohio)	New-Tone Electronics International** P. O. Box 1738 Bloomfield, NJ 07003 (800) 631-1250
All Electronics Box 20406 905 S. Vermont Los Angeles, CA 90006	Godbout Electronics Box 2355 Oakland Airport, CA 94614 (415) 562-0636	Olsen Electronics 2850 Gilchrist Road Akron, OH 44305 (800) 321-2424
Adelco 2789 Q Milburn Avenue Baldwin, NY 11510 (516) 378-4555	Hal-Tronix P. O. Box 1101 Southgate, MI 48195 (313) 285-1782	Poly-Paks P. O. Box 942 S. Lynnfield, MA 01940
Ancrona P. O. Box 2208 Culver City, CA 90230 (213) 641-4064	Hobbyworld 19511 Business Center Drive Northridge, CA 91324 (800) 423-5387 (Nationwide) (800) 382-3651 (California)	Quest Electronics P. O. Box 4430C Santa Clara, CA 95054 (408) 988-1640
Applied Invention RD 2, Route 21 Hillsdale, NY 12529 (518) 325-3911	Integrated Circuits, Unlimited* 7889 Clairmont Mesa Blvd. San Diego, CA 92111 (800) 854-2211 (Nationwide) (800) 542-0239 (California)	Radiokit Box 411 Greenville, NH 03048 (603) 878-1033
B & F Enterprises* 119 Foster Street Peabody, MA 01960 (617) 531-5774	International Components Corp. P. O. Box 1837 Columbia, MO 65201 (314) 474-9485	Ramsay Electronics 2575 Balrd Road Penfield, NY 14526 (716) 586-3950
Bullet Electronics* P. O. Box 401244 Garland, TX 75040 (214) 278-3553	International Electronics Unlimited 225 Broadway Jackson, CA 95642 (209) 223-3870	Semiconductor Surplus 2822 N. 32nd Street, Unit 1 Phoenix, AZ 85008 (602) 956-9423
Chaney Electronics P. O. Box 27038 Denver, CO 80227 (303) 781-5750	Jamaco Electronics 1021 Howard Avenue San Carlos, CA 94070 (415) 582-8097	Solid State Sales P. O. Box 74A Somerville, MA 02143 (617) 547-7053
Digi-Key Corp. P. O. Box 677 Thief River Falls, MN 56701 (218) 681-6674	JDR Microdevices 1101 S. Winchester Blvd. San Jose, CA 95128	Surplus Electronics Corp. 7294 N. W. 54th Street Miami, FL 33168 (305) 887-8228
Digital Research Corp. of Texas* P. O. Box 401247A Garland, TX 75040 (214) 271-2481	Marlin P. Jones & Assoc. P. O. Box 12685-E Lake Park, FL 33403 (305) 848-8238	
Edlies Electronics, Inc. 2700-DP Hempstead Turnpike Levittown, NY 11756 (516) 735-3330	John Meshna, Jr. Surplus Supplies Box 62 E. Lynn, MA 01904 (617) 595-2275	
Electronic Distributors, Inc. 4900 Elston Avenue Chicago, IL 60630 (312) 283-4800	MHz Electronics 2111 W. Camelback Phoenix, AZ 85015 (602) 242-3037	
ETCO Electronics North Country Shopping Center Plattsburgh, NY 12901 (518) 561-8700		

notes:
 (1) *No minimum order or handling charge.
 There may be postage charges, however.
 (2) **Specializes in Japanese semiconductors.
 (3) Most of the firms listed will accept major charge cards, such as Master Charge or Visa, on telephone orders. A larger minimum order size may be required, however.
 (4) The "800-series" numbers listed are toll-free.

--ham radio, July 1981

Continued from Pg. 4

time to mark your ballot for your favorite article for the past year. If you would like to be eligible for the 1984 award, submit you article(s) to the editor.

I also wish to apologize for this issue of the Quarterly being late. Presently, the

Quarterly is without an editor. For the time being, please send your input, articles, letters, etc. to Fred Bonavita, W5QJM, whose address is inside the front page.

Anyone who is interested in the job of Editor, please contact the Secretary/Treasurer, Ed Lappi, WD4LOO, whose address is also inside the front page.

OFFICIAL BALLOT
QRP ARCI TECHNICAL ACHIEVEMENT AWARD

Following is a list of technical articles which have appeared in the Quarterly in 1983, and you are urged to vote for your favorite.

Pick only one article and check the appropriate space. Send your ballot to Ed Lappi (address below) as soon as possible

1. MAVTI 40 SECOND ORDER MFA BANDPASS FILTER
by Paul Kranz, W1CFI Jan. 83 ()
2. 15 METER MOBIL ANTENNA
by Louis J. Jacobs, Jr. KN9V Jan. 83 ()
3. BUILD A NOISE-FIGHTING LOOP FOR 160 METERS
by C.F. Rockey, W9SCH Jan. 83 ()
4. A 40 METER XMFR
by Antoine F. Galindo, AC6G Apr. 83 ()
5. KEYSER INTERFACE
by Michael Bryce, WB8VGE Apr. 83 ()
6. 30 METERS ON THE HW-8
by John McNeil, WA2KSM Apr. 83 ()
7. CHRISTMAS-TREE BULBS AS R.F. INDICATORS
by C.F. Rockey, W9SCH Apr. 83 ()
8. HW-8 OFFSET PROBLEM SOLVED
by Barry L. Ives, AI2T July 83 ()
9. WHAZZIS..A TONE ORGAN FOR CW
by Mike Gregg, KA5EXI July 83 ()

(for write-in)

DEADLINE: Nov. 30, 1983

Send ballots to: Edwin R. Lappi, WD4LOO
Secretary/Treasurer, QRP ARCI
203 Lynn Drive
Carrboro, NC 27510

AND REMEMBER: You could win the 1984 Technical Achievement Award, consisting of a plaque. Send your technical article(s) to the editor of the Quarterly (see inside the front page for address) and get in the running now.

NET NOTES: The Gulf States QRP Net (QRP GSN) will stay on 7040 kHz when the shift to Standard Time occurs late in October, according to W5QJM, NCS. GSN will continue to meet Wednesday nights, 0200Z (Thurs.) The net previously moved to 80 meters on the switch to Standard Time months. Meanwhile, efforts are still under way to find a volunteer for NCS duties in the Pacific Northwest region of the country to serve the upper 7th call district. Interested souls should get in touch with K5VOL, Red Reynolds, the club net manager.

ORP ARCI
P. O. Box 12072
Capitol Station
Austin, TX 78711



FALL QSO PARTY
October 22-23!
See Page 1