

National Contest Journal (ISSN 0899-0131) is published bimonthly in January, March, May, July, September and November by the American Radio Relay League, 225 Main St, Newington, CT 06111-1494, USA. Periodicals postage paid at Hartford, Connecticut, and at additional mailing offices. POSTMASTER: Send address changes to: National Contest Journal, 225 Main St, Newington, CT 06111-1494, USA.

Publisher

American Radio Relay League
225 Main St, Newington, CT 06111
tel: 860-594-0200
fax: 860-594-0259 (24-hour direct line)
E-Mail: hq@arrl.org
Web: www.arrl.org

Editor

Kirk Pickering, K4RO
k4ro@k4ro.net

Managing Editor

Rick Lindquist, WW1ME
ww1me@arrl.org

NCJ Web Page

Bruce Horn, WA7BNM, Webmaster
www.ncjweb.com

ARRL Officers

President: Kay C. Craigie, N3KN

Executive Vice President:

David Sumner, K1ZZ

Contributing Editors

Gary Sutcliffe, W9XT—Contest Tips, Tricks & Techniques

Mike Goldstein, VE3GFN—Little Pistol Pages

Jon Jones, N0JK—VHF-UHF Contesting!

Carl Luetzelschwab, K9LA—Propagation

Ed Muns, W0YK—RTTY Contesting

Pete Smith, N4ZR—Software for Contesters

John Miller, K6MM—NCJ Profiles

Don Daso, K4ZA—Workshop Chronicles

North American QSO Party, CW

Chris Hurlbut, KL9A

3117A Fen Way, Bozeman, MT 59718

cwnaqpmgr@ncjweb.com

North American QSO Party, SSB

Bill Lippert, AC0W

2013 6th Ave SE, Austin, MN 55912-4321

ssbnaqpmgr@ncjweb.com

North American QSO Party, RTTY

Mark Aaker, K6UFO

300 Berry St, Unit 1009, San Francisco, CA 94158-1668

rttynaqpmgr@ncjweb.com

North American Sprint, CW

Boring Amateur Radio Club

15125 Bartell Rd, Boring, OR 97009

cwsprintmgr@ncjweb.com

North American Sprint, Phone

Christopher Tate, N6WM

12450 Del Valle Rd, Livermore, CA 94550

sbsprintmgr@ncjweb.com

North American Sprint, RTTY

Ed Muns, W0YK

PO Box 1877, Los Gatos, CA 95031-1877

rttysprintmgr@ncjweb.com

Advertising Information Contact:

Janet Rocco, tel 860-594-0203;

fax 860-594-0303; jrocco@arrl.org

NCJ subscription orders, changes of address, and reports of missing or damaged copies should be addressed to ARRL, 225 Main St, Newington, CT 06111 and be marked **NCJ Circulation**. ARRL members are asked to include their membership control number or their QST mailing label.

Submit articles, letters and club newsletters to NCJ, Kirk Pickering, K4RO, Editor, 4502 Scenic View Dr, Pegram, TN 37143 USA

The NA Sprint and NA QSO Parties are not sponsored by ARRL.

Yearly Subscription rates: In the US \$20

US by First Class Mail \$28

International and Canada by airmail \$32

All original material not attributed to another source is copyright © 2013 by The American Radio Relay League, Inc. Materials may be excerpted from the NCJ without prior permission provided that the original contributor is credited, and the NCJ is identified as the source.

In order to insure prompt delivery, we ask that you periodically check the address information on your mailing label. If you find any inaccuracies, please contact the Circulation Department immediately. Thank you for your assistance.

- 2 Editorial *Kirk Pickering, K4RO*

FEATURES

- 3 A Rotator Cage for Tubular Towers
Greg Ord, W8WWW
- 5 Erratum: Noise-Power Ratio Testing of HF Receivers
Adam Farson, VA7OJ/AB4OJ1
- 6 The Marathoner's Contest
Ron Angle, K6KYJ
- 7 The TriMox — A Moxon Tribander for a Holiday DXpedition
Brian Machesney, K1LI
- 11 Pre-Contest Planning with *ViewProp*
Rick Kiessig, ZL2HAM
- 15 I Love the Tennessee QSO Party!
Brad Brooks, WF7T
- 18 WRTC 2014 Station Test Report
Randy Thompson, K5ZD

COLUMNS

- 22 NCJ Profiles: Hank Garretson, W6SX
John Miller, K6MM
- 24 40 Years Ago in NCJ
Kirk Pickering, K4RO
- 25 Workshop Chronicles
Don Daso, K4ZA
- 26 VHF-UHF Contesting!
Jon K. Jones, N0JK
- 28 Little Pistol Pages
Mike Goldstein, VE3GFN
- 30 Contest Tips, Tricks and Techniques
Gary Sutcliffe, W9XT
- 32 RTTY Contesting
Ed Muns, W0YK
- 34 Software for Contesters
Pete Smith, N4ZR

Contests

- 37 Results: North American QSO Party RTTY — July 2013
Mark Aaker, K6UFO
- 42 Results: North American QSO Party SSB — August 2013
Bill Lippert, AC0W

ADVERTISING INDEX

Alfa Radio Ltd: 17
Array Solutions: COVER II
ARRL: 41, 48
Bencher: 5
Clark Electronics: 21
DX Engineering: 35
Elecraft: COVER III
Green Heron Engineering LLC: 2

InnovAntennas America, Inc: COVER IV
International Radio INRAD: 29
K0XG Systems: 27
RF Parts: 31, 33
Remote Ham Radio: 10
SuperBertha: 27
Unified Microsystems: 31