

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

Scott Wright, MD, K0MD
scottwrightmd@me.com

Deputy Editor

Fred Regennitter, K4IU

Managing Editor

Rick Lindquist, WW1ME
ww1me@arrl.org

NCJ Web Page

Kirk Pickering, K4RO, Webmaster
www.ncjweb.com

ARRL Officers

President: Rick Roderick, K5UR

Contributing Editors

Gary Sutcliffe, W9XT—Contest Tips, Tricks & Techniques

Mike Goldstein, VE3GFN—Little Pistol Pages

Jon Jones, N0JK—VHF-UHF Contesting!

Ed Muns, W0YK—RTTY Contesting

John Miller, K6MM—NCJ Profiles

Don Daso, K4ZA—Workshop Chronicles

Neil Rapp, WB9VPG—Next Gen Contesters

John Thompson, K3MD—Surveys and Book Reviews

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
1262 Big Appy Trail, Bonner, MT 59823
cwsprintmgr@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, correspondence, and club newsletters to NCJ, Scott Wright, K0MD, 1224 Meadowlark Ct, SW, Rochester, MN 55902.

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

Yearly Subscription rates: In the US \$25

US by First Class Mail \$34

International and Canada by airmail \$32

All original material not attributed to another source is copyright © 2018 by The American Radio Relay League, Inc. Materials may be excerpted from 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 From the Editor *Scott Wright, MD, K0MD*

FEATURES

- 3 M6T: The Stealth Multi-Multi
Dave Lawley, G4BUO and Andy Cook, G4PIQ
- 6 How Much Receiver Performance Does a Contester Need? — Part 3
Peter Chadwick, G3RZP
- 11 Radiosport 2.0: Predictions about the Future of Radio Contesting
Scott Wright, MD, K0MD
- 13 A 5 Element Switchable Vertical Parasitic Array for 160 Meters
Joel Harrison, W5ZN
- 17 Some US Contesters Evaluate their Transceivers
Scott Wright, MD, K0MD
- 23 Some Impressions of WRTC 2018
Roberto Ramirez, CE3CT
- 26 NCJ Interviews: Scott Redd, K0DQ
John Dorr, K1AR
- 31 NCJ Profile: Karlos Luis Bruno, LU1FKR
Roberto Ramirez, CE3CT

Columns

- 34 The Little Pistols Page *Mike Goldstein, VE3GFN*
- 36 Next-Gen Contesters *Neil Rapp, WB9VPG*
- 37 VHF-UHF Contesting! *Jon K. Jones, N0JK*
- 38 Workshop Chronicles *Don Daso, K4ZA*
- 40 Contest Tips, Tricks & Techniques *Gary Sutcliffe, W9XT*
- 42 Digital Contesting *Ed Muns, W0YK*

ADVERTISING INDEX

Alfa Radio Ltd: 35

Array Solutions: Cover 2

Clark Electronics: 24

DXEngineering: Cover 4

Elecraft: Cover 3

FlexRadio Systems: 25

Green Heron Engineering, LLC: 12

Heil Sound: 27

SteppIR Communications Systems: 39

Unified Microsystems: 30