

This Month in QST

September 2011 ■ Volume 95 Number 9

Technical

- 30 Optimizing Amateur Radio Resources for Major Disasters**..... **Victor Cid, W3CID, and Andrew Mitz, WA3LTJ**
Amateur Radio operators discover a unique way to link a group of Maryland hospitals during major disasters.
- 35 An Emergency Radio Package — or The Radio in a Box II**..... **Geoff Haines, N1GY**
Be prepared! A different kind of go-kit.
- 39 New Car RFI? Buyer Beware**..... **John Perone, W8RXX**
After kicking the tires on your prospective new car, be sure bring along your spectrum analyzer to test the RFI.
- 40 Add 6 Meters to Your Triband Trap Yagi**..... **Joel R. Hallas, W1ZR**
Bring your tribander up-to-date with this stealthy — and effective — antenna mod.
- 43 Yet Another Crystal Calibrator — The YACC-1-2-3** **Robert Miller, KE6F**
Microcontroller technology and low cost set this trio of crystal calibrators apart.
- 47 Product Review** **Mark Wilson, K1RO**
Yaesu VX-8GR dual band handheld transceiver; Ameritron ALS-1300 HF power amplifier



47

News and Features

- 9 It Seems to Us: Our Future in Emergency Communications**
- 12 This Just In**..... **Joel P. Kleinman, N1BKE**
ARRL Board of Directors meets in Connecticut; Inside HQ; Media Hits; more.
- 63 Alabama Slammer**..... **David Gillespie, W4LHQ**
The ARES® response to devastating tornadoes provides lessons that will help in future emergencies.
- 65 EMCOMM-1 — Customized Communications**..... **Rick Palm, K1CE**
A novel approach to mobile emergency communications.
- 68 Extra Crisp**..... **Steve Sant Andrea, AG1YK**
Get the message through correctly with short, efficient communications.
- 69 Teaching Teens Amateur Radio Using Cowboy Ethics** **Devon Day, KF6KEE**
Pony up to discover a new way to introduce Amateur Radio to a younger crowd.
- 71 2010-2011 School Club Roundup Results** **Lew Malchick, N2RQ**
From kindergartners to college students, the School Club Roundup is a surefire way to get youth on the air.
- 72 2011 JOTA 54 — Welcome Gals and Guys!**..... **Debra Johnson, K1DMJ**
Join in with Boy Scouts, Cub Scouts, Girl Scouts and Girl Guides as Jamboree on the Air celebrates its 54th year.
- 73 2011 Simulated Emergency Test** **Steve Ewald, WV1X**
Join ARES®, RACES, the NTS and other groups as they join forces to respond to a Section-wide simulated emergency in October.
- 74 Registration Now Open for New Online Introduction to Emergency Communication Course**..... **Debra Johnson, K1DMJ**
This new course includes updated content to prepare hams to be ready to respond when a disaster occurs.
- 75 Happenings**..... **S. Khrystyne Keane, K1SFA**
ARRL, NWS sign updated *Memorandum of Understanding*; ARRL announces Second Century Campaign Committee; SWPC to continue WWV and WWVH broadcasts; FCC news; more.

Interested in Writing for QST? www.arrl.org/qst-author-guide e-mail: qst@arrl.org

Radiosport

- 81** Contest Corral H. Ward Silver, N0AX
82 2010 ARRL DX Phone Contest Results H. Ward Silver, N0AX



Harold Kramer, WJ1B
 Publisher
Steve Ford, WB8IMY
 Editor
Joel P. Kleinman, N1BKE
 Managing Editor
Joel R. Hallas, W1ZR
 Technical Editor
Larry D. Wolfgang, WR1B
 Senior Assistant Technical Editor
Steve Sant Andrea, AG1YK
 Assistant Editor

S. Khrystyne Keane, K1SFA
Happenings
Mark J. Wilson, K1RO
Product Review
Bob Allison, WB1GCM
Product Review Lab Testing
Steve Ewald, WV1X
Public Service
Mary M. Hobart, K1MMH
At the Foundation
Sean Kutzko, KX9X
Radiosport
Bill Moore, NC1L
DX and VHF/UHF Century Clubs

John Troster, W6ISQ
Paul L. Rinaldo, W4RI
Al Brogdon, W1AB
Bernie McClenny, W3UR
John Dilks, K2TQN
H. Ward Silver, N0AX
Paul Wade, W1GHZ
Jon Jones, N0JK
 Contributing Editors

Michelle Bloom, WB1ENT
 Production Supervisor
Jodi Morin, KA1JPA
 Assistant Production Supervisor
Maty Weinberg, KB1EIB
 Production Coordinator

Sue Fagan, KB1OKW
 Graphic Design Supervisor
David Pingree, N1NAS
 Senior Technical Illustrator
Carol Michaud, KB1QAW
 Technical Illustrator

Nancy G. Hallas, W1NCY
Elaine Lengyel
 Proofreaders

Debra Jahnke, K1DAJ
 Business Services Manager
 QST Advertising

Bob Inderbitzen, NQ1R
 Marketing Manager

Amy Hurtado, KB1NXO
 Circulation Manager

Diane Szlachetka, KB1OKV
 Advertising Graphics Designer

In order to ensure 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 at circulation@arrl.org or **860-594-0200** immediately. Thank you for your assistance.

Reprints and permissions:
permission@arrl.org
 See page 14 for detailed contact information.
 Telephone: **860-594-0200**
 Fax: **860-594-0259**



150



Our Cover

This month, *QST* celebrates those who apply their communications skills to provide support to law enforcement, emergency management agencies and their local communities. *Top right:* In April, more than 250 hams volunteered at Course Net Control during the 114th running of the Boston Marathon. Photo by Harold Kramer, WJ1B. *Lower left:* Mickey Gillespie, KJ4KZT, of Vestavia, Alabama, relays damage reports following the massive April tornadoes that hit Tuscaloosa and other parts of Alabama. Photo by Roger Smith. See the article that begins on page 63.

Departments

ARRL VEC Volunteer Examiner Honor Roll	92
At the Foundation	94
Convention and Hamfest Calendar	99
Correspondence	24
The Doctor is IN	56
Eclectic Technology	98
Feedback	46
Field Organization Reports	102
Guide to ARRL Member Services	14
Ham Ads	154
Hands-On Radio	59
Hints & Kinks	61
How's DX?	88
Index of Advertisers	156
Inside HQ	13
New Products	38, 46
Public Service	78
QuickStats	140
Short Takes	58
Silent Keys	103
Special Events	93
Strays	74, 103
Technical Correspondence	53
Up Front in QST	20
Vintage Radio	96
The World Above 50 MHz	90
2011 ARRL Photo Contest Winners	150
75, 50 and 25 Years Ago	102

September 2011 ■ Volume 95 Number 9

QST (ISSN:0033-4812) is published monthly as its official journal by the American Radio Relay League, Inc, 225 Main Street, Newington, CT 06111-1494, USA. Periodicals postage paid at Hartford, CT, USA and at additional mailing offices.

POSTMASTER: Send address changes to: QST, 225 Main St, Newington, CT 06111-1494, USA. Canada Post: Publications Mail Agreement #40612608. Canada Returns to be sent to Bleuchip International, PO Box 25542, London, ON N6C 6B2.

US & Possessions: Membership in the ARRL, including a one year subscription to *QST*, is available to individuals at \$39. Licensed radio amateurs age 21 and under and the eldest licensee in the household may qualify for the rate of \$20. Life Membership, including a subscription to *QST* is available at \$975.* Membership includes \$15 per year for subscription to *QST*. Membership and *QST* cannot be separated. Libraries and institutions, \$39 per year. Single copies \$5.

International

To compensate for additional postage for mailing outside the US, the following rates apply:

Canada: Membership in the ARRL, including a one year subscription to *QST*, \$49, payable in US funds. Life Membership, including a subscription to *QST* is available at \$1225.* Libraries and institutions, \$49 per year.

All Other Countries: Membership in the ARRL, including a one year subscription to *QST*, \$62, payable in US funds. Life Membership, includ-

ing a subscription to *QST* is available at \$1550.* Libraries and institutions, \$62 per year.

Membership without *QST* is available to the immediate family of a member living at the same address, and to anyone who is legally blind, for \$8 per year.

Foreign remittances should be by international postal or express money order or bank draft negotiable in the US and for an equivalent amount in US funds.

Copyright © 2011 by the American Radio Relay League Inc. Title registered at the US Patent Office. International copyright secured. All rights reserved. Quedan reservados todos los derechos. Printed in the USA.

QST®, *DXCC*®, *VUCC*®, *DX Century Club*®, *ARES*®, *Amateur Radio Emergency Service*® and *ARRL*, the national association for Amateur Radio® are registered trademarks of the American Radio Relay League, Inc.

The *ARRL* and *QST* in no way warrant the products described or reviewed herein.

QST is available to blind and physically handicapped individuals on audio cassette from the Library of Congress, National Library Service for the Blind and Physically Handicapped. Call 1-800-424-8567.

Indexed by Applied Science and Technology Index, Library of Congress Catalog Card No: 21-9421.

*Payment arrangements available. Please write for details.