



In This Issue

May 2015

Volume 99 Number 5

Harold Kramer, WJ1B
Publisher

Steve Ford, WB8IMY
Editor

Becky R. Schoenfeld, W1BXY
Managing Editor

Larry D. Wolfgang, WR1B
Senior Assistant Technical Editor

Steve Sant Andrea, AG1YK
Assistant Editor

Rick Lindquist, WW1ME
Happenings

Bob Allison, WB1GCM
Product Review Lab Testing

Paul L. Rinaldo, W4RI
Mark J. Wilson, K1RO
Al Brogdon, W1AB
Bernie McClenny, W3UR
H. Ward Silver, N0AX
Paul Wade, W1GHZ
Jon Jones, N0JK
Rick Palm, K1CE
Joel R. Hallas, W1ZR
Barry Shackelford, W6YE
Kai Siwiak, KE4PT
Contributing Editors

Michelle Bloom, WB1ENT
Production Supervisor

Jodi Morin, KA1JPA
Asst Production Supervisor

Maty Weinberg, KB1EIB
Production Coordinator

Sue Fagan, KB1OKW
Graphic Design Supervisor

David Pingree, N1NAS
Senior Technical Illustrator

Jennifer Glifort
Copy Editor

Debra Jahnke, K1DAJ
Business Services Manager
QST Advertising

Bob Inderbitzen, NQ1R
Marketing Manager

Yvette Vinci, KC1AIM
Circulation Manager

Diane Szlachetka, KB1OKV
Advertising Graphics Designer

Steve Ewald, WV1X
Field Organization Supervisor

Gail Iannone
Convention Program Manager

Technical

APRS In Your Pocket 30

Jerry Clement, VE6AB
For a lightweight portable station, all you need is a handheld transceiver, a tiny packet TNC, and an *Android* smartphone.

A Voltage or Power Monitor 32

Mert Nellis, W0UFO
This versatile microcontroller-based circuit provides critical information at a glance.

The Modern Mobile 35

Alan Applegate, K0BG
Rethink how mobile Amateur Radios connect to modern electronics-laden vehicles.

A 100 Hz to 10 MHz Signal Generator 37

Jim Veatch, WA2EUJ
Here is a compact generator with a touchscreen and a computer interface.

Short Delayed Echoes Continue to Amaze 41

Gene Greneker, K4MOG
Some, but not all, transmissions produce echoes at two frequencies.

Done in One (Or Perhaps Two): Key Your Rig Without a Wire 44

Paul Danzer, N1II
The world has gone wireless — your straight key can, too.

A Portable Power Supply for WERS 47

Frederick A. Long, ex-W8NE, ex-W8BSL
Our series of articles reprinted from vintage issues of *QST* continues, this time with a selection from the May 1944 issue.

Product Review 51

Mark Wilson, K1RO
Alinco DX-10 10 Meter Transceiver; Aspect Solar EnergyBar 250 and EP-55 Solar Panel Charger; West Mountain Radio DC-to-GO Battery Box with RIrunner 4008 and Super PWRgate PG40S; Spiderbeam Aluminum Telescopic Mast; Phonema KSP3 Ham Speaker.



News and Features

It Seems to Us 9

David Sumner, K1ZZ
Toothless Tigers?

Inside HQ 13

Harold Kramer, WJ1B
Frequently Asked Questions

A New Zealand Portable Adventure 69

Kazimierz "Kai" Siwiak, KE4PT
Turn your international travel into an Amateur Radio event.

Turtlehead Peak On the Air 71

Mark Beaufait, WA7YER
A first attempt at putting a summit on the air has a few ups and downs.

The US Islands Awards Program 73

Sean Kutzko, KX9X
Offering ham radio adventure for two decades, now with a new special event on May 9.

Answering the Call of Dayton 75

Steve Ford, WB8IMY
Hams have been marching to southwestern Ohio every year since 1952. What turned this city into a destination for Amateur Radio?

Happenings 77

Rick Lindquist, WW1ME
The "Amateur Radio Parity Act of 2015" is introduced to the US House of Representatives, Amateur Radio licensing is at an all-time high, Section Manager changes; more.

Our Cover

QST Contributing Editor Kai Siwiak, ZL/KE4PT, operating his 5 W "DX go-bag" station and HF loop antenna from the peak of Mt Victoria in Wellington, New Zealand. [Diana Siwiak, KE4QXL, photo]



Radiosport

Contest Corral 82

H. Ward Silver, N0AX

2014 ARRL November CW Sweepstakes Results 83

Kelly Taylor, VE4XT

Tube gear, clean copy, and team efforts all played a role in CW Sweeps.

2014 EME Contest Results 87

Rick Rosen, K1DS

You can moonbounce with the big guns.

2015 Field Day Announcement 88

The largest on-air Amateur Radio event in the world returns June 27 – 28! If you haven't already started planning your effort, now is the time to do so!

The 2015 ARRL June VHF Contest 97



Columns

| | |
|--------------------------------|-----|
| Correspondence | 24 |
| The Doctor is In | 61 |
| Eclectic Technology..... | 50 |
| Hands-On Radio | 63 |
| Hints & Kinks | 67 |
| How's DX? | 89 |
| Public Service..... | 80 |
| Technical Correspondence | 65 |
| Up Front | 20 |
| Vintage Radio..... | 98 |
| The World Above 50 MHz | 91 |
| 75/50/25 Years Ago..... | 100 |

Departments

| | |
|---------------------------------------------|------------|
| ARRL Member Services | 14 |
| ARRL Section Managers..... | 16 |
| Convention and Hamfest Calendar | 96 |
| Feedback | 36 |
| Field Organization Reports..... | 100 |
| Ham Ads..... | 162, 163 |
| Index of Advertisers..... | 164, 165 |
| Life Members Elected March 10, 2015... .. | 95 |
| New Books | 34, 43 |
| New Products | 40, 46, 60 |
| Officers, Division Directors, and Staff ... | 15 |
| QuickStats..... | 146 |
| Silent Keys | 101 |
| Special Event Stations..... | 94 |
| Strays | 74, 90, 93 |
| W1AW Qualifying Runs | 95 |

Digital and Mobile Editions

ARRL members can access the digital edition via a link at www.arrl.org/qst, download our iOS app from the iTunes Store, and download our Android app from the Google Play Store.

Interested in Writing for QST?

www.arrl.org/qst-author-guide
e-mail: qst@arrl.org

May 2015

Volume 99 Number 5

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 #90-0901437. Canada returns to be sent to IMEX Global Solutions, 1501 Morse Ave, Elk Grove Village, IL 60007.

US & Possessions: Membership in the ARRL, including a 1-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 \$4.99.

International

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

Canada: Membership in the ARRL, including a 1-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 1-year subscription to QST, \$62, payable in US funds. Life Membership, including 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 © 2015 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 from the Library of Congress, National Library Service for the Blind and Physically Handicapped. Call 1-800-424-8567 or go to www.loc.gov/nls/.

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

*Payment arrangements available. Please write for details.

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

Details of our Online Privacy Policy can be found at www.arrl.org/online-privacy-policy.

Telephone: 860-594-0200

Fax: 860-594-0259