

David A. Minster, NA2AA
Publisher

Becky R. Schoenfeld, W1BXY
Editorial Director

Dana Kasowitz
Managing Editor

Leanna Figlewski, KC1RMP
Editor

Sam Shaner
Assistant Editor

Bart Jahnke, W9JJ
Radiosport & Regulatory
Information Manager

John Ross, KD8IDJ
Happenings

Pascal Villeneuve, VA2PV
Bernie McClenny, W3UR
Dave Casler, KE0OG
Paul Wade, W1GHZ
Jon Jones, N0JK
Rick Palm, K1CE
Barry Shackelford, W6YE
Kai Siwiak, KE4PT
Bruce Draper, AA5B
Phil Salas, AD5X
John Stanley, K4ERO
Contributing Editors

Michelle Bloom, WB1ENT
Production Supervisor

Jodi Morin, KA1JPA
Assistant Production Supervisor

Maty Weinberg, KB1EIB
Production Coordinator

David Pingree, N1NAS
Senior Technical Illustrator

Janet Rocco, W1JLR
Advertising Sales Manager

Bob Inderbitzen, NQ1R
Director of Marketing & Innovation

Yvette Vinci, KC1AIM
Membership Manager

Steve Ewald, WV1X
Field Organization Supervisor

9 Second Century

Farewell, 2022

30 A Simple CW QRP Transceiver for 40 Meters

Jim Forkin, WA3TFS

34 Product Review

Pascal Villeneuve, VA2PV

K1EL K45 CW Modem; Buddipole BuddiHEX
Portable Hexagonal Beam Antenna; WA3RNC
TR-35 40/30/20/17-Meter CW Transceiver Kit



48 Amateur Radio at the Idaho Sled Dog Challenge

Mark Fledderjohann, K17EZS

51 Preparing for Portable Operation Abroad

Stuart Thomas, KB1HQS

60 2022 ARRL Field Day Results

Bob Naumann, W5OV; Bart Jahnke, W9JJ, and Paul Bourque, N1SFE
See the full 2022 ARRL Field Day results in the digital edition of this issue.

74 2022 ARRL June VHF Contest Results

76 The 2023 ARRL International DX Contest

76 June 2023 Kids Day

77 The 2023 ARRL Straight Key Night

77 The 2023 ARRL RTTY Roundup

78 The 2023 January VHF Contest

91 A Look Back — January 1973



Columns

Ask Dave.....	46
Celebrating Our Legacy	95
Classic Radio	96
Club Station	80
Contest Corral.....	59
Correspondence	24
Happenings.....	54
How's DX?.....	82
Member Spotlight	13
Public Service	57
Up Front	20
The World Above 50 MHz.....	84
100, 50, and 25 Years Ago	98

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.

Write for QST

www.arrl.org/qst-author-guide
email: qst@arrl.org

Departments

ARRL Section Managers.....	16
ARRL Special Service Clubs.....	81
ARRL VEC Volunteer Examiner Honor Roll	89
Certificate of Code Proficiency Recipients	90
Convention and Hamfest Calendar	87
Feedback	97
Field Organization Reports	58
Guide to ARRL Member Benefits.....	14
Ham Ads	124
Index of Advertisers.....	126, 127
Life Members	33
Officers, Division Directors, and Staff.....	15
QST Cover Plaque Award	50
Season's Greetings	88
Silent Keys	99
Special Event Stations.....	86
Strays	97
This Month in QEX.....	78
Volunteer Monitor Program Report	87
W1AW Qualifying Runs	90
W1AW Schedule	79
W1AW's QSL File.....	28



Our Cover

The comfort and joy of the end-of-year holiday season shines softly out of this nostalgic scene painted by Jim Whitlock, WA4QKV, of Tyrone, Georgia. Season's greetings to our members. We'll see you in 2023!



30



QST (ISSN:0033-4812) is published monthly as its official journal by the American Radio Relay League, Inc., 225 Main St., Newington, CT 06111-1400, USA. Periodicals postage paid at Hartford, CT, USA and at additional mailing offices.

POSTMASTER: Send address changes to: QST, 225 Main St., Newington, CT 06111-1400, 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 ARRL, including a 1-year subscription to QST, is available to individuals at \$49. Licensed radio amateurs age 21 and under and the eldest licensee in the household may qualify for the rate of \$25. Life Membership, including a subscription to QST, is available at \$1,225.* Membership includes \$21 per year for subscription to QST. Membership and QST cannot be separated. Libraries and institutions, \$49 per year. Single copies \$6.95.

International

To compensate for additional postage for mailing outside the US, the following rates apply: Membership in ARRL, including a 1-year subscription to QST, \$76, payable in US funds. Life Membership, including a subscription to QST, is available at \$1,900.* Libraries and institutions, \$76 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 \$10 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.

Membership in ARRL, including a 1-year subscription to Digital QST only, is available to Canadian and International members at \$49.

Copyright © 2022 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®, Logbook of The World®, LoTW®, and ARRL The National Association for Amateur Radio® are registered trademarks of the American Radio Relay League, Inc.

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