

Publications and Products Fall 2015 – Winter 2016

Amateur Radio

Operating

www.arrl.org/shop = 1-888-277-5289

The ARRL Operating Manual **10th Edition**

Item No. 5965 - \$34.95 ARRL Member Price! \$29.95

The ARRL Operating Manual is the most complete quide to Amateur Radio operating. It has everything you need to know about ham radio operating-from exploring the broad range of activities, to sharpening your on-air skills. It's filled with information every ham needs, from newcomers looking for



basic operating techniques to more experienced hams looking for new things to do with their gear.

Whether your interests are more technical or public service oriented, you'll turn to The Operating Manual for information on what to operate, where to operate and how to operate.

Table of Contents:

- Amateur Radio
- All About Operating
- VHF/UHF
- VHF/UHF
- Disaster, Public Service and Emergency Communications
- Traffic Handling
- DXing
- Contesting
- Competitive Wireless
- HF Digital Communications
- Image Communications
- Amateur Satellites
- Legally, Safely, Appropriately
- The FCC Rules and You
- Remote Station Control Over the Internet .
- Operating Awards
- References



format from Amazon.

Oscilloscopes for Radio Amateurs Item No. 0976 - \$22.95

ARRL Member Price \$19.95

Filled with practical information you'll need for using a scope. It begins with an overview of the oscilloscope and continues on to discuss characteristics. applications, probes, controls, and input modes. Select an oscilloscope that is right for you!

The digital edition is available in the Kindle format from Amazon

Discover Ham Radio e-book

This booklet is an overview of Amateur Radio and all it has to offer. It discusses the various aspects of the fascinating hobby, provides information about how to pursue your first ham radio license, and how to get started.



DISCOVER

Rac lam

Your First Amateur **Radio HF Station** Steve Ford, WB8IMY

Item No. 0079 - \$22.95 ARRL Member Price! \$19.95

The most complete guide to setting up your station and getting started in HF communications. Whether you're new to Amateur Radio or HF operating, live on acres of open property or in a tiny apartment, this

book will show you how to get on the air and enjoy all that Amateur Radio has to offer.

The digital edition is available in the Kindle format from Amazon.



Handheld Transceiver Steve Ford, WB8IM) Item No. 3077 – \$17.95 ARRL Member Price! \$15.95

essential guide! Unlock " hidden" capabilities that aren't described

Amateur Radio on the Move

-from Your Car or RV, Boat, Airplane, Motorcycle or Backpack!

Expert advice for radio operating on the go! Mobile radios. installation, antennas, operating tips, software and more.



Rules and Regulations for the Amateur Radio Service

Includes the complete Part 97 rules from Title 47 of the Code of Federal Regulations. Rules effective September 3, 2014.

ARRL Software Library for Hams

CD-ROM, version 4.0



Item No. 4364 - \$22.95 ARRL Member Price! \$19.95

Quick access to utilities, applications and information: Software defined radio, station logging, digital operating, CW decoding, image

editing and more.



Your First Amateur Radio HF Station

From Antoneous to Amplifiers

If you own a handheld

transceiver, or trying to decide which one to buy, this is an in user manuals

The digital edition is available in the Kindle format from Amazon.

Item No. 9450 - \$19.95

Amateur Radio

FCC

3rd Edition Item No. 1173 - \$5.95



Storm Spotting and Amateur Radio

Item No. 0908 - \$22.95

A resource for Amateur Radio operators who volunteer as trained storm spotters. Includes equipment, safety, storm spotter activation procedures, developing a local storm spotter manual, and the experiences of storm spotters from around the country.

The ARRL Satellite Handbook

Steve Ford, WB8IMY Item No. 9857 – \$24.95

Bring the thrill of satellite communications within your reach! Filled with understandable descriptions and illustrations, this book includes all the tools you need to participate in this exciting field.





Morse Code Operating for Amateur Radio

Item No. 0004 - \$17.95 ARRL Member Price! \$15.95

Discover the advantages to learning and using Morse code, how to set up your station for CW and how to adjust your Morse code key. You'll gain the confidence you need to try out your new skills on the air!

Your Introduction to Morse Code

Item No. 8314 - \$12.95

Don't just learn the code-master it! This set includes two audio CDs with nearly 2-1/2 hours of practice. As you learn Morse code at 5 words-per-minute. Follow the proven ARRL teaching system.





ARRL Morse Code Oscillator Kit

Item No. 0022 - \$24.95

A great "beginners" electronics kit! Ideal for ARRL members, Amateur Radio newcomers and instructors seeking a classroom kit-building experience.

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Explore the fun of Morse code! This Morse code straight key includes an adjustment for tension and an adjustment for gap size. The base includes mounting holes. For use with ARRL's Morse Code Oscillator Kit (sold separately).

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The best directory of frequencies for the thousands of repeaters around the country!

- Mobile App included enjoy 12 months of the full version app!
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- Spiral Bound Desktop Edition! Lays flat.
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- Easy-to-read listings.
- Repeater notes located right up front.





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ARRL Repeater Directory App

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Download an app to access **The ARRL Repeater Directory**[®] database from your Android phones and tablets.



your Android phones and tablets. Purchase your activation code from ARRL, then visit Google Play™ to download the free application. Grab your phone and go!

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TravelPlus for Repeaters[™]

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For more information and to place an order visit **www.arrl.org/shop**. You will receive an order department of the second second

will receive an email confirmation with instructions for downloading and installing to your GPS.

Minimum System Requirements: Garmin nüvi, dazl or zūmo GPS with at least 3.0 MB free memory space available for a POI file.

Advancing the Art, Science, and Enjoyment of Radio-Since 1914

2 Technical www.arrl.org/shop = 1-888-277-5289

The ARRL Handbook 2016 Edition

Hardcover, Book with CD-ROM Item No. 0420 - \$49.95 (retail \$59.95)

Softcover, Book with CD-ROM Item No. 0413 - \$49.95

The ARRL Handbook is a valued reference for radio electronics and wireless communications. Since 1926. it has kept radio amateurs, professionals, and experimenters immersed in applied theory and do-it-yourself projects. It covers a wealth of information: the fundamentals of

electronics and radio signals, construction practices, antennas and propagation, equipment and circuit design, and other useful reference information.

Table of Contents:

Introduction

What is Amateur (Ham) Radio

Fundamental Theory

- Electrical Fundamentals
- Analog Basics
- Digital Basics

Practical Design and Principles

- RF Techniques
- Computer-Aided Circuit Design
- Power Supplies
- Modulation
- Oscillators and Synthesizers
- Mixers, Modulators and Demodulators
- RF and AF Filters
- Receivers Transmitters

The Comprehensive

Transceivers

- Transmitters
- Reference
- Telemetry and Navigation
- DSP and Software Radio Design
- Digital Modes
- RF Power Amplifiers
- Repeaters

Antenna Systems and Radio Propagation

- Propagation of Radio Signals
- Transmission Lines
- Antennas

Equipment Construction and Maintenance

- Component Data and References
- Construction Techniques
- Station Accessories
- Test Equipment and Measurements
- Troubleshooting and Maintenance
- RF Interference

Station Assembly and Management Safety

Assembling a Station

Operating Supplement – on CD-ROM

- Space, Digital, Image Communications
- 2016 Annual Transceiver Survey

Amateur Radio Transceiver Performance Testing

Understanding HF transceiver Data from QST Product Reviews

Bob Allison, WB1GCM Item No. 0086 - \$22.95 ARRL Member Price! \$19.95

Learn the technical terms and parameters presented in QST's Product Review, how published data relates to actual performance, and what the numbers mean. Great for Amateur Radio operators looking to purchase a transceiver.



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Hands-On Radio

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Use the parts kit to build the experiments in Volume 1 and 2 yourself! Books sold separately.

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Handy slide rule when tinkering with filters, oscillators, impedance matching circuits or antenna coils. Quick and easy circuit calculations.

ARRL, the national association for Amateur Radio®



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RF Engineering





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ARRL "Basic" Book Series



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Written in a friendly, easy-tounderstand style that beginners and nontechnical readers will enjoy. Real-world examples and clear illustrations make the study of electronics interesting and fun! The digital edition is available in the Kindle format from Amazon.



Basic Badio

Understanding the Key **Building Blocks** Joel R. Hallas, W1ZR Item No. 9558 - \$29.95 An introduction to radio for everyone. Reveals the key building blocks of radio: receivers, transmitters, antennas, and propagation. Simple, build-it-yourself projects turn theory into practice.

Basic Antennas

Understanding Practical Antennas and Design Joel R. Hallas, W1ZR Item No. 9994 - \$29.95 A comprehensive introduction to antennas. Includes basic concepts, practical designs, and easy-to-build antennas. You'll learn how to make antennas that really work!

Collect the Entire Set!

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Your DIY Guide to Ham Radio Homebrewing Joel R. Hallas, W1ZR Item No. 0482 - \$22.95 **ARRL Member Price! \$19.95**

Your guide to setting up and maintaining an efficient at-home laboratory and work station. It describes the tools you'll need for projects ranging from assembling electronic kits to building and testing antennas.



Arduino for Ham Radio

Glen Popiel, KW5GP Item No. 0161 – \$34.95 ARRL Member Price! \$29.95

An introduction to Arduino microcontrollers and practical projects for the Amateur Radio station. It starts by building a solid foundation through descriptions of various Arduino boards and add-on components, followed by a collection of ham radio-related practical projects.



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The digital edition is available in the Kindle format from Amazon.

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Explore the science and technology and "nooks and crannies" of the radio universe. You'll find solving long-standing mysteries of radio doesn't require expensive hardware, but a scientific mindset and attention to detail.



Advancing the Art, Science, and Enjoyment of Radio-Since 1914



Ham Radio for Arduino and PICAXE

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80

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4th Edition Rich Arland, K7SZ Item No. 5828 – \$27.95 ARRL Member Price! \$24.95

Your guidebook to the fascinating world of low power QRP operating. With only 5 W or less — sometimes much less — you can enjoy conversations over hundreds and even thousands of miles. **Bonus!** Includes the complete assembly manual for the MFJ Cub Transceiver Kit (sold separately).





Get the Book with the Kit!

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8 years of the best projects and problem-solving techniques from QSTs **Hints & Kinks** column, one of the most popular sections of the journal. Projects and practical information you can use every day!

More QRP Power

Item No. 9655 – \$19.95 Here are more projects and articles for low power radio operating, from the pages of QST and QEX magazines: construction practices, transceivers, transmitters, receivers, accessories, and antennas.



VER

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Meet the FCC RF exposure regulations! It's not complicated! Learn how to operate your station safely and legally using simple step-by-step ARRL worksheets and tables. Understanding Your Antenna Analyzer



Understanding Your Antenna Analyzer

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A Radio Amateur's Guide to Antenna Matching Item No. 0984 – \$22.95

Explore the design, construction and applications of the different types of antenna tuners. You'll gain a better understanding of your antenna system and the way it can be improved through the use of the appropriate antenna tuner



ARRL's RF Amplifier Classics

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Interference solutions covering telephones, power lines, computers and audio equipment. Resources for addressing new realities of digital cable TV systems, over-the-air TV signals, trouble-shooting, and hybrid and all-electric automobiles.

Antenna Turners

3/201 J

RL Guide b

Circuit Simulation and Analysis Item No. 0055 – \$27.95 ARRL Member Price! \$24.95

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Antennas 5 www.arrl.org/shop = 1-888-277-5289

The ARRL Antenna **Book 23rd Edition**

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Softcover, Book with CD-ROM Item No. 0444 - \$49.95

The ARRL Antenna Book has everything you need to design vour own complete antenna system. Since 1939, it has maintained its place at the forefront-a single resource covering antenna theory, design and construction, and practical treatments and projects. It describes hundreds of antenna designs: wire, vertical, portable and mobile, and new high-performance VHF/UHF Yagi designs.

Table of Contents:

Basic Antenna Topics

- Antenna Fundamentals
- Effects of Ground
- Loop Antennas
- Radio Wave Propagation Multielement Arrays

Dipoles & Ground-Planes

Log Periodic Dipole Arrays Antenna Modeling

MF and HF Antennas

- Single-Band MF and HF Antennas
- Multiband HF Antennas
- HF Yagi and Quad Antennas
- Broadside and End-Fire Arrays
- Long-Wire and Traveling-Wave Antennas
- HF Antenna System Design

VHF, UHF, and Microwave Antennas • VHF and UHF Antenna Systems

- Mobile VHF and UHF Antennas
- Space Communications Antenna Systems
- Repeater Antenna Systems

Special Applications

- Portable Antennas
- Stealth and Limited Space Antennas
- Mobile and Maritime HF Antennas Receiving and Direction-Finding Antennas

Transmission Lines

Transmission Lines

Transmission Line System Techniques

Building and Maintaining Antenna Systems

- Antenna Materials and Construction
- Putting Up Towers and Antennas
- Antenna and Transmission Line Measurements.
- Antenna System Troubleshooting

The Care and Feeding of Transmission Lines

Joel Hallas, W1ZR Item No. 4784 - \$27.95 ARRL Member Price! \$24.95

An introduction to the various types of transmission lines. key parameters of coaxial cable and balanced line types. Learn how to select the appropriate transmission line for an application and install it.



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A resource for radio amateurs who live in apartments, condominiums, or houses on small lots. Filled with practical advice, you'll find the right antenna design to fit your space available.

> SIMPLE d FUN

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for Beginners

Ward Silver, NØAX

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antenna modeling program

Antenna

Designer's

Notebook

Short Antennas for

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through innovative designs for

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techniques to enjoy 160 meters.

relatively compact antennas.

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advanced skills in antenna

modeling, this book walks

loss, and employ other

ANTENNAS

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More than 70 well-tested, fun and entirely useful projects. Hundreds of photos and illustrations. Build your first VHF or HF antenna. Explore dipoles. verticals, beams and more. These antennas really work!



Antenna Designer's Notebook

Brian Cake, KF2YN Item No. 1479 - \$34.95

Open a window into the mind of the antenna designer as the design is imagined, perfected, and constructed. It provides a thorough description of new components of antennas and the C-pole - and practical antennas made from them. CD-ROM included!



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Small Antenn for Small Space





ARRL's Portable Antenna Classics

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Single and multiband designs for all bands from 80 through 10 meters.

VHF/UHF Antennas

Antennas for 6 meters, 2 meters and even 70 centimeters.

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Ingenious ideas for getting your portable antenna off the ground and keeping it there.

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Volume 1

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Volume 3

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So many wire antenna designs have proven to be first class performers! Here are two volumes devoted to wire antennas, from the simple to the complex. Includes articles on dipoles, loops, rhombics, wire beams and receive antennasand some time-proven classics!

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designs from around the world—from 136 kHz to 1.3 GHz, receiving and transmitting, fixed and mobile designs.

For more Antenna Books visit www.arrl.org/shop



Vertical Antenna Classics VERTICAL Item No. 5218 - \$12

Vertical antennas are everywhere-on cell phones, broadcast towers, portable radios and vehicles. And for good reason! Here are the best articles from ARRL publications in one book. Vertical antenna theory and modeling, VHF and UHF, HF,

directional arrays, radials, product suppliers and more.

More Vertical Antenna Classics

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ARRL's Yagi Antenna Classics

Yagis, Quads, Loops and other Beam Antennas

Item No. 8187 - \$17.95

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With years of experience as a professional tower climber, Don Daso, K4ZA, leads you through designing and building your own antenna tower. You'll learn the



skills, tools, climbing techniques, and safety measures necessary to improve your antenna system.



ON4UN's Low Band DXing

Antennas, Equipment and Techniques for DXcitement on 160, 80 and 40 Meters 5th Edition

John Devoldere, ON4UN Item No. 8560 - \$44.95

Includes antenna designs, operating guidelines, and an insider's scoop on low-band DXing. There's something for every active low-band operator, contester, and DX chaser! This edition features new insights and new design techniques for receiving antennas, dipole antennas and phased arrays. Bundled with the fully searchable and complete book on CD-ROM!



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The most popular introduction into the world of Amateur Radio!





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ARRL License Manuals and Q&A's are available in the Kindle format from Amazon.

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The ARRL Extra Class License Manual

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- Detailed explanations for all questions, including FCC rules.



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- Brief, clear explanations for all questions.

ARRL Licensing References

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Flashcards allow you to break up the learning task into

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Web-based online training for the Amateur Radio licensing exams. This convenient format allows you to study when you want, at your own pace. All platforms are always up-to-date with the latest question pools. Guarantéed - pass the exam, or get a full refund!

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- Extra Class Course Item No. 0150 - \$34.95

Volunteeer Examiner Items



ARRL/VEC Volunteer Examiner Manual

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ARRL Amateur Radio Volunteer Examiner program. Whether you have ever thought about becoming a VE or you are a seasoned VE, this is everything ARRL VEs need to know.



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VF exams!

Carry your VE exam supplies in style! Black portfolio is imprinted with words "ARRL VEC Exams" and features a zipper closure on top.





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Symbolize your involvement as an ARRL Volunteer Examiner with this attractive black and gold pin. Wear it proudly! Size 1" round.

Become an ARRL Volunteer Examiner today!

Advancing the Art, Science, and Enjoyment of Radio-Since 1914





The Amateur Radio Public Service Handbook

First Edition Item No. 4845 - \$39.95 ARRL Member Price! \$34.95

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