

1999 ANNUAL INDEX

Subject/Article	Description	Author	Issue/Pg.
Antennas			
3 Ls 4 2m	Three-element stubbed coaxial vert.	WD4KMP	JAN 18
Long Beach Longwire	Beach kite antenna	WB6MEU	JUL 39
Easy Antenna Reference	Quick basics for a quick decision	VK2AT	FEB 52
Easy Antenna Reference	Part 2: More options	VK2AT	JUN 26
EZ-BZ Deck Antenna	20-meter dipole with linear loading	AB2BZ	MAY 16
FYI: FQY	Another look at the Fractal Quad Yagi	KF7BS	OCT 18
How to Turn a Deaf Ear	... with your antenna.	VK2AT	AUG 13
Isotron Notes	Simple tips	AD1B	NOV 24
My Old Kentucky (Satellite) Home	Satellite antennas	KA9SOF	JUN 33
No Bum Steer	Maximize your loop's performance	W6US	NOV 34
Screwy Mobile Antenna Mods	Fine-tune that screwdriver-type...	WB4RNO	JUN 28
Secrets of Transmission Lines	Part 1: Intro and dummy load project	KE2QJ	AUG 16
Telescoping PVC Mast	Getting it up in awkward places	KB7WOS	JUN 35
The Ultra-Simple 20	20-meter band transmitting antenna	G2BZQ	FEB 21
The VK Winged Flapper	Mobile antenna design	VK2AT	JUL 20
Three-Element Circular Quad	For 10m	K8IHQ	JUN 17
Transmitting Ferrite Loop	For 80/160	G2BZQ	MAR 14
Triband Vertical Array...	for Big 120° Bandwidth Signal	WZ8A	MAY 33
Y2K Portable J-Pole	Full-size roll-up antenna	WA8TXT	SEP 16
ATV, FSTV, SSTV, Video			
Kiwi SSTV	How they do it in ZL-land	ZL1AAN	AUG 20
TV Tutor	How to get started in SSTV	ZL1AAN	DEC 22
Circuits			
All About Op Amps	And then some.	W2GOM/7	AUG 24
Big-Time Bench Supply	Highly regulated SCR design	Sellen	DEC 10
Euthanasia Keyer Project	Quick and painless lambic	KC3ZQ	JUN 37
Everyman's Guide to Active Filter Design	Now you know	KC3ZQ	MAR 26
FM CW!	Repeater code-practice sessions	WB9YBM	OCT 16
Here Comes the Sun	Part 2: Geomagnetic monitoring	WA8YKN	FEB 34
Mods for the OHR 100A	Make a popular QRP rig even better	W4LJD	FEB 30
Operating Crystals on the Fifth Overtone	Feedback type oscillator circuit	N2DCH	JUN 30
PIC-based DTMF Project	Build this decoder and learn.	KC3XM	AUG 10
The Franklin VFO	A project for the serious home-brewer	W4LJC	FEB 24
Construction			
Building a Better Collins	Add this \$1 solid state replacement...	W2CQM	NOV 19
Card-File 40	A direct conversion QRP transceiver	KC3ZQ	MAY 10
Ham Station Control and Monitor	Can you do without this?	W4LJD	AUG 39
Home-Brew a Customized HF Amplifier	Boost your output	WI5W	JAN 10
Home-Brewing a 3 kW+ Dummy Load	Check out your big gun amplifier	W2CQM	MAY 22
It's Senior Spider vs. Y2K!	Build this QRP rig now—just in case.	WA8TXT	JUL 34
PIC Key, PIC Key	A simple CW keyer	UY5DJ	SEP 10
Regens for the Millennium	Part 2: Winding Coils	KA9GDL	JUL 22
Radio Fun in the Sun	Complete solar-powered QRP station.	W7DE	AUG 30
The Amazing Wiebelfeltzer	CW filter	K8MKB	JUL 31
We Must Be Dreaming	Home-brew receiver project	Duncan	FEB 10
CW - Code			
Enjoy CW Rag-Chewing	Pointers for fun communicating	W6BNB	MAR 55
Euthanasia Keyer Project	Quick and painless lambic	KC3ZQ	JUN 37
Keys to Good Code	Secrets of sending precise Morse code	W6BNB	MAR 31
PIC Key, PIC Key	A simple CW keyer	UY5DJ	SEP 10
Why Not b-Morse?	Preserve your Morse code	VE2MHZ	NOV 18
Digital Modes			
Ham to Ham	Microprocessor Chips	NZ9E	JAN 43
The Digital Port	SSTV, APRS, and packet	KB7NO	JAN 54
The Digital Port	Budget portable/mobile digital	KB7NO	FEB 47
The Digital Port	SSTV	KB7NO	MAR 46
The Digital Port	RITTY (a program by K6STI)	KB7NO	MAY 50
The Digital Port	PSK31	KB7NO	JUN 52
The Digital Port	PSK31	KB7NO	JUL 52

The Digital Port	Software	KB7NO	AUG 46
The Digital Port	ChromaSound program	KB7NO	SEP 45
The Digital Port	PSK31 gets even better	KB7NO	OCT 43
The Digital Port	PSKGNR software	KB7NO	NOV 52
The Digital Port	Logger	KB7NO	DEC 39
The Missing Link: A PSK Interface	Put this new mode into action!	WA8TXT	AUG 27
DX			
73's DX Dynasty Award	Awards List	Staff	JAN 34
Planning a DXpedition	Here's what to do	W4DC	NOV 14
Editorials			
Never Say Die	Peoria!, License Drop, Bad News	W2NSD/1	JAN 4
Never Say Die	Cancer!, The Odds, Karlson	W2NSD/1	FEB 4
Never Say Die	Med. research, Advertising basics	W2NSD/1	MAR 4
Never Say Die	May Fool Issue, Trust Your Doctor	W2NSD/1	MAY 4
Never Say Die	Kids Killing Kids, Sugar, Schools Suck	W2NSD/1	JUN 4
Never Say Die	Why You Get Sick; More Mooning	W2NSD/1	JUL 4
Never Say Die	Y2K, etc.	W2NSD/1	AUG 4
Never Say Die	Art Bell W6OBB, Licenses plummeting	W2NSD/1	SEP 4
Never Say Die	Writing for 73, Dayton 1999	W2NSD/1	OCT 4
Never Say Die	60-year ARRL membership	W2NSD/1	NOV 4
Never Say Die	The Latin Exam; Progress	W2NSD/1	DEC 4
Education			
Hams With Class	Famous folks	WB2MGP	FEB 51
Emergency Preparations			
On the Go	Y2K thoughts	KE8YN/4	JUN 47
On the Go	More on Y2K	KE8YN/4	JUL 51
On the Go	What should we be doing to prepare?	KE8YN/4	AUG 44
On the Go	Y2K continued	KE8YN/4	SEP 52
On the Go	Even more Y2K	KE8YN/4	OCT 53
On the Go	Floyd interrupts the routine	KE8YN/4	NOV 50
On the Go	Hurricane encore	KE8YN/4	DEC 42
Equipment			
LM- and BC-221 Frequency Multiplier	Generate signals up to 1000 MHz	W6WTU	FEB 17
General Interest			
1998 Annual Index	Six-page guide to 73	Staff	JAN 36
Anti-Metric?	You already use it...	WDØGCK	MAR 23
From the Ukraine: A Radio Amateur's Story	Behind the Iron Curtain	UY5DJ	JAN 24
From the Ukraine: A Radio Amateur's Story	Part 2: Water-cooled amp?	UY5DJ	JUN 21
Getting Your Foot in the Public Service Door	How to get your club involved ...	KN4HKL	SEP 30
Here Comes the Sun	Part 1: Cycle 23 and you	WA8YKN	JAN 28
Here Comes the Sun	Part 2: Geomagnetic monitoring	WA8YKN	FEB 34
Secret Death Ray	Or is HAARP a useful science tool?	N7MGT	DEC 14
Signals From the Ice	Alaska's Matanuska Glacier	KL7JR	MAR 20
The Pluck of the Irish	Was Wee Mac a leprechaun...?	K9AZG	MAR 10
Why Not Renew On-Line?	Here's how to untangle the FCC Web	AC3L	DEC 24
High Frequency			
Home-Brew a Customized HF Amplifier	Boost your output	WI5W	JAN 10
Mobile			
On the Go	A value statement	KE8YN/4	FEB 46
Modifications			
Mods for the OHR 100A	Make a popular QRP rig even better	W4LJD	FEB 30
Regens for the Millennium	Part 1: A new look at an old friend.	KA9GDL	JUN 10
Screwy Mobile Antenna Mods	Fine-tune that screwdriver-type...	WB4RNO	JUN 28
New Products (by manufacturer)			
Adonis USA	AM-7500E amplified desktop mike	Staff	FEB 48
Alinco	Alinco DJ-X10T Wide Range Rcvr.	Staff	JUL 48
Ameritron	ATR-30 True Legal Limit™ ant. tuner	Staff	MAR 48
Antex	Soldering Catalog	Staff	AUG 48
CAIG Laboratories	New catalog	Staff	MAR 48
Coleman Company	ULTIMITE Generator	Staff	MAY 48
Consumer Information Center	No Smoking Stickers	Staff	SEP 48

Cutting Edge Enterprises	PowerPort PocketPRO™	Staff	JUL 48
Cutting Edge Enterprises	PowerSafe 2000	Staff	OCT 48
Cutting Edge Enterprises	Quick Draw Holster	Staff	OCT 48
Cutting Edge Enterprises	The Radio Badge	Staff	SEP 48
Cutting Edge Enterprises	World Pack™ backpack	Staff	JUN 48
Dynamic Electronics	LP-1 Lightning Surge Protector	Staff	MAR 48
George Murphy	HAMCALC v.38 diskette	Staff	JUL 48
Glen Martin Engineering	Roller bearing set	Staff	JAN 48
HAL	DXP38	Staff	FEB 48
Hamtronics	Low-Noise Receiver Preamps	Staff	NOV 48
Hamtronics	LPN series preselectors	Staff	AUG 48
Hamtronics	UHF Exciters and Recvrs. T304, R304	Staff	JUN 48
ICOM	IC-T81A Handheld	Staff	DEC 48
ICOM	IC-706MKIIG All mode rig	Staff	JUN 48
ICOM	IC-2800H dual-band FM Xceiver.	Staff	NOV 48
Jensen Tools	Latest catalog	Staff	JAN 48
MCM Electronics	Free Catalogs	Staff	MAY 48
MFJ	Dual-band VHF/UHF SWR/pwr meter	Staff	SEP 48
MFJ	HamGear™ Tactical Chest Harness	Staff	MAY 48
MFJ	Helping Hands bench assistant	Staff	OCT 48
MFJ	Helping Hands tool kit	Staff	OCT 48
MFJ	MFJ-125 DXer's Dream 24-hr clock	Staff	JUL 48
MFJ	MFJ-126 quartz wall clock	Staff	OCT 48
MFJ	MFJ-731 RF measurement filter	Staff	JUN 48
MFJ	MFJ-801 Field Strength Meter	Staff	AUG 48
MFJ	MFJ-922 VHF/UHF antenna tuner	Staff	MAR 48
MFJ	Model 1817 HT antenna	Staff	MAY 48
MFJ	MFJ-291I and K HandyPal™ Earbud	Staff	JAN 48
MFJ	MFJ-4125 MightLite™ SPS	Staff	SEP 48
MFJ	MFJ-8121 World Band Receiver	Staff	JUN 48
MFJ	Super Ni-MH AA batteries	Staff	SEP 48
MFJ Publishing	Ladder Crystal Filters	Staff	SEP 48
MFJ Publishing	Radio Components Handbook	Silva	FEB 48
Mirage	B-320-G BruteFORCE™ amplifier	Staff	MAR 48
Morse Express	Chinese Army (PLA) Keys	Staff	JUL 48
Morse Express	Quadriom TA-1 dual paddle	Staff	OCT 48
Murphy	HAMCALC version 40	Staff	DEC 48
NCG Company	Comet CA-HV & CA-UHV mobile ants.	Staff	SEP 48
NCG Company	Natcomm MH-510 HT Tribander Ant.	Staff	AUG 48
Orion Microsystems	NEC4WIN95 antenna simulations sftw.	Staff	JAN 48
Peet Bros.	Weather stations	Staff	FEB 48
Premier Communications Corp.	PRYME MMC-100 Sun Visor Mike	Staff	DEC 48
RF Nulink	9600B Wireless Networking Base Sta.	Staff	FEB 48
Sescom	LAB Box-IT enclosures	Staff	SEP 48
Silver Lake Tech.	Print Screen Works software	Staff	AUG 48
Svetlana Electron Devices	3CX800A7, 8874/3CX400A7 triodes	Staff	MAR 48
Timestep	PROsat for Windows "i"	Staff	MAY 48
Tippecanoe	Model ZK-1 Key	Staff	NOV 48
Tippecanoe Radio Co.	Navy Model ZR-1 Crystal Radio Set	Staff	SEP 48
The Radio Works	T-4G Line Isolator™	Staff	JAN 48
Vibroplex	Code Warrior Jr.	Staff	DEC 48
Wahl Electronics	EZ-Torch	Staff	JAN 48
Wavesure, LLC	Nighthawk Microlight II	Staff	NOV 48

Power Supplies

Emergency Power for Hams	Gas, Wind, Solar	WA8YKN	JUL 10
HT Porta-Power Project	Portable extended power pkg. for HTs	WB3CEH	OCT 15
The Evolution of Power Supplies	Part 2: Switching techniques	W6WTU	JAN 21
Tracking Dual-Voltage Power Supply	Build something handy	W6WTU	FEB 55
Your Batteries Ready for Y2K?	Electrifying tidbits...	N7MGT	NOV 28

QRP

It's Senior Spider vs. Y2K!	Build this QRP rig now—just in case.	WA8TXT	JUL 34
Mods for the OHR 100A	Make a popular QRP rig even better	W4LJD	FEB 30
QRP	Hybrid ICs	WB8VGE	FEB 45
QRP	Design your own PC board	WB8VGE	MAR 44
QRP	Demise of the packet modem kit	WB8VGE	MAY 52
QRP	PC board using photo resist method	WB8VGE	JUN 50
QRP	SST CW transceivers	WB8VGE	SEP 53
QRP	Heathkit HW-8	WB8VGE	OCT 41

QRP	More HW-8	WB8VGE	NOV 51
Radio Fun in the Sun	Complete solar-powered QRP station.	W7DE	AUG 30
Simple Direct-Conversion Receiver	For QRPers and receiver aficionados	Sellen	SEP 38
Radio Direction Finding, Fox Hunts			
Homing In	A banner year	K0OV	JAN 52
Homing In	Mobile T-hunting, international-style	K0OV	FEB 42
Homing In	A rechargeable alternative	K0OV	MAR 42
Homing In	Dayton, Portland, and South Texas	K0OV	MAY 45
Homing In	Grungebusters; RACES to the rescue	K0OV	JUN 45
Homing In	Four centuries of foxhunting	K0OV	JUL 47
Homing In	Dayton does DF	K0OV	SEP 54
Homing In	ARDF Championships	K0OV	OCT 54
Receivers			
We Must Be Dreaming	Home-brew receiver project	Duncan	FEB 10
Reprints			
Instruction Instructions	Discover hidden savings ...	N6HYK	AUG 35
Read All About It!	Part 1 of Techno-Trivia	K8JWR	DEC 26
The History of Ham Radio	Parts 1 and 2: to 1920	Shalkhausser	OCT 31
The History of Ham Radio	Part 3: 1920-21	Shalkhausser	NOV 41
You, Too, Can Be an SOB	Hams should be heard but not seen	K9AZG	JUL 27
Reviews (by manufacturer)			
Central Machinery	12-inch Shear, Press Brake, Slip Roll	W7DE	AUG 34
Elecraft	K2 radio receiver kit	W3DX	MAR 37
Hamtronics	T301 — Our Exciting New Fox	WB9RRT	MAY 20
ICOM	IC-706MKII Shack-in-a-box	W2BLC	FEB 28
Idiom Press	Logikeyer III Memory Keyer	W3DX	MAR 39
Oak Hills Research	OHR 100A single band transceiver kits	W3DX	MAR 39
Oak Hills Research	OHR 500 5-band CW transceiver kit	W3DX	MAR 38
Oak Hills Research	WM-2 QRP Wattmeter kit	W3DX	MAR 38
Small Wonders Labs	Small Wonders WM-20 SSB Xcvr. kit	AC4HF	NOV 32
Small Wonders Labs	SW+ transceiver kit	W3DX	MAR 38
Ten-Tec	1254 Microprocessor-controlled Rcvr.	WB8VGE	JUL 28
Wilderness Radio	KC2 multifunction accessory kit	W3DX	MAR 39
Wilderness Radio	NorCal 40A kit	W3DX	MAR 39
Wilderness Radio	Sierra multiband superhet transcv.	W3DX	MAR 39
Reviews (by product)			
12-inch Shear, Press Brake and Slip Roll	Central Machinery	W7DE	AUG 34
K2 radio receiver kit	Elecraft	W3DX	MAR 37
IC-706MKII Shack-in-a-box	ICOM	W2BLC	FEB 28
KC2 multifunction accessory kit	Wilderness Radio	W3DX	MAR 39
Logikeyer III Memory Keyer	Idiom Press	W3DX	MAR 39
NorCal 40A kit	Wilderness Radio	W3DX	MAR 39
OHR 100A single band transceiver kits	Oak Hills Research	W3DX	MAR 39
OHR 500 5-band CW transceiver kit	Oak Hills Research	W3DX	MAR 38
Sierra multiband superhet transceiver	Wilderness Radio	W3DX	MAR 39
SW+ transceiver kit	Small Wonders Labs	W3DX	MAR 38
T301 - Our Exciting New Fox	Hamtronics	WB9RRT	MAY 20
Ten-Tec 1254	Ten-Tec	WB8VGE	JUL 28
WM-20 SSB transceiver kit	Small Wonders Labs	AC4HF	NOV 32
WM-2 Wattmeter	Oak Hills Research	W3DX	MAR 38
Satellite Operation, EME, Space			
Hamsats	16th Annual Space Symposium	W5ACM	JAN 46
Hamsats	Sputnik 41; RS-18; SATEDU	W5ACM	MAR 53
Hamsats	MIR, MIR SSTV, SAREX, SAFEX	W5ACM	MAY 43
Hamsats	Delta II launcher, ARGOS, ORSTED	W5ACM	JUN 42
Hamsats	UoSAT 12, RS-19	W5ACM	JUL 45
Hamsats	SUNSAT-OSCAR-35	W5ACM	AUG 50
Hamsats	Field Day 1999; Portable toys	W5ACM	SEP 50
Hamsats	JAWSAT, ASUSat-1, OPAL, FalconSat	W5ACM	OCT 51
Hamsats	Keeping up with the changes.	W5ACM	DEC 45
My Old Kentucky (Satellite) Home	Satellite antennas	KA9SOF	JUN 33
Test Equipment			
Basic Transceiver Tester	A good beginner's project	WB9YBM	NOV 26
Home-Brewing a 3 kW+ Dummy Load	Check out your big gun amplifier	W2CQM	MAY 22

Need a UHF Dipper?	Part 1: Old TV tuners to the rescue!	W6WTU	OCT 10
Need a UHF Dipper?	Part 2: External coupling	W6WTU	NOV 10
Need a UHF Dipper?	Part 3: Mods for using the tuner	W6WTU	DEC 35
Simple RF Signal Generator	Add this test gear to your bench	W4LJD	SEP 32

Tutorials

Defogging Microstrips	An intro to microstripline filters	WA9PYH	SEP 19
Easy Antenna Reference	Quick basics for a quick decision	VK2AT	FEB 52
Easy Antenna Reference	Part 2: More options	VK2AT	JUN 26
The Evolution of Power Supplies	Part 2: Switching techniques	W6WTU	JAN 21
Networking with Thevenin and Kirchhoff	Network analysis	W2GOM/7	MAY 30
Regens for the Millennium Part 2	Winding Coils	KA9GDL	JUL 22
Secrets of Transmission Lines	Part 1: Intro and dummy load project	KE2QJ	AUG 16
Secrets of Transmission Lines	Part 2: Review of AC fundamentals	KE2QJ	SEP 26
Secrets of Transmission Lines	Part 3: More AC review	KE2QJ	OCT 22
Secrets of Transmission Lines	Part 4: Traveling waves	KE2QJ	NOV 37
Secrets of Transmission Lines	Part 5: Impedance and reflections	KE1QJ	DEC 31
The Long-Lost Art of Conversational CW	Know what to say	WF6P	DEC 18
TV Tutor	How to get started in SSTV	ZL1AAN	DEC 22

Updates

All About Op Amps	AUG 1999 issue, page 24	W2GOM/7	NOV 6
Mods for the OHR 100	FEB 1999 issue, page 32	W4LJD	MAR 54
Never Say Die	JAN 1999 issue (VERVE = FFRF)	W2NSD/1	MAR 54
Regens for the Millennium, Part 1	JUN 1999 issue, page 10	KA9GDL	JUL 56

VHF/UHF

Above & Beyond	Ramsey FR-10 FM receiver	WB6IGP	FEB 39
Above & Beyond	Part 2: The Gunn diode modulator PS	WB6IGP	MAR 50
Above & Beyond	Extend test equip. to 24 GHz	WB6IGP	MAY 40
Above & Beyond	Microwave power meters	WB6IGP	JUN 40
Above & Beyond	Looking for Project Gigantic	WB6IGP	JUL 43
Above & Beyond	Restoring older multimode radios	WB6IGP	AUG 42
Above & Beyond	The IC-202 SSB transceiver	WB6IGP	SEP 43
Above & Beyond	The Internet, a new frontier	WB6IGP	OCT 45
Above & Beyond	Considerations for portable operation	WB6IGP	NOV 46
Above & Beyond	Microwave update 1999	WB6IGP	DEC 43

NEVER SAY DIE

continued from page 48

been mercilessly harassed by FDA teams and the AMA just for experimenting with the bioelectrifier. His results, with cancer, HIV, and so on, have been so spectacular that he's opening a clinic in Costa Rica to get away from the FDA threats and to make this marvelous way of saving lives available to more people.

Yes, I know, when I started writing about the bioelectrifier (blood purifier) back in 1994, you thought Wayne was nuts again. I'm used to that. Well, it saves many readers from bothering to think or do any homework. I was crazy when I predicted that the whole world would want to share our repeater technology. Back in 1969 I was making phone calls anywhere I wanted with my Motorola

HT-220 from the New Hampshire ski slopes via my repeater. Then I was able to do the same when skiing in Aspen. I was so excited that I published hundreds of articles and book after book on repeaters. The result of the ham development of repeater technology was the worldwide cell phone system of today. Crazy Wayne.

Then the first microcomputer came along a few years later. The computer industry bigwigs said they were toys and that I was crazy when I said they'd eventually be in millions of homes and be on just about every desk in businesses. Those bigwigs are all out of business now.

The music and hi-fi magazines all sneered at CDs. Crazy Wayne started *CD Review*, which soon became the biggest music magazine in the world.

Have you built a bioelec-

trifier yet? What's stopping you? The parts cost under \$20. Maybe you're waiting until your lifestyle knocks you on your ass before I'm able to get your attention. I've published two articles on how to build the device, but they're all sold out. The Miller circuit, plus a simpler one by Bob Beck, are in the *Bioelectrifier Handbook*, which is \$10. See my ad on page 63. This book includes instructions on how to use it.

The electronically challenged can buy a Plant Growth Stimulator unit for \$155 ppd. from Butterfly Products, Box 1729, Hillsborough NH 03244. It has essentially the same circuit and will, if you use it as intended, stimulate the hell out of your plants. This unit also includes pure silver wire and will make silver colloid for you.

Or you can get in touch with me for the address of the

clinic in Costa Rica and save yourself the trouble of building a bioelectrifier.

A better approach, I feel, is to change your lifestyle so you won't need emergency repairs. Why wait until cancer, a heart attack, stroke, diabetes, arthritis, multiple sclerosis, and so on have hit?

And one of 'em surely will unless you make some big changes.

In All Fairness

An Irish television producer called. He was doing a program commemorating the Moon landings of thirty years ago, and one of his crew was a ham who had a copy of my *Moondoggle* book. Would I be available for an interview to present the contrarian side? The program would run from about 11 p.m. my time to 5

Continued on page 62