# Electronics Illustrated Searchable Index 1958-1972

#### INTERCOMS (C)

Convert Radio to Intercom			
P. Hertzberg	.76	July	58
Intercom, Wireless; Hollander	.42	Feb.	59
Intercom for Boatman; Buckwalter.	.36	Aug.	60
Intercom in Every Room;		-	
P. Hertzberg	79	Sept.	59
Intercom, Transistor; G. Gordon	87	May	60
Intercom, Transistor; Smith	58	Dec.	<b>5</b> 9

#### KITS AND KIT REVIEWS

Association B. P. C.			
Amateur Radio Gear	00		-
Converter, Heath SC-2 Modulator-Driver, EICO 730	.90	June	60
Modulator-Driver, EICO 730	.63	Sept.	59
Receiver, Heath Mohawk Receiver, Heath Mohican	58	Jan.	59
Receiver, Heath Mohican	62	July	60
Receiver Knight All_Rand	AA	Sant	50
Receiver, Philmore CR-5AC Transmitter, AMECO AC-1T	.62	Mar.	60
Transmitter, AMECO AC-1T	86	Nov.	59
Transmitter, EICO 720	.62	May	59
Audio-Hi-Fi			
Amplifiers-Preamplifiers			
Arkay SPA-55 Stereo Amp	82	Feb	59
Citation II Stereo Amp	64	Nov	60
EICO AF-4 Stereo Preamp-Amp	100	Mar.	60
	100	No.	50
Knight 18 Watt Mono	40	NOV.	90
Prooms Ams	00	3.4	F0
Preamp-Amp Lafayette KT-236 Stereo	.66	May	59
Larayette K1-236 Stereo			
Preamp-Amp	100	July	60
Paco SA-40 Stereo Preamp-Amp	77	Dec.	59
Regency HFT-1K Transistor			
Preamp	76	July	59
Loudspeakers			
Heath AS-2 Wide Range Speaker	86	Oct.	60
Knight Speaker and Enclosure	78	Jan	59
Windhaven Extension Speaker	70	July	59
Stereo Adapter—Lafavette			
KT-315	46	Anr	50
Tape Recorder	. 10	iipi.	00
Tape Recorder Heath TR-1D Stereo	53	Inn	60
Tuners		Jan.	UU
EICO HFT-90 FM	64	I	50
EICO HFT-94K	E 4	Cant	00
Gray HSK-33	00	0.	
Dala O King K 22	88	Uct.	59
Rek-O-Kut K-33	.50	Mar.	59
Weathers Check Out Your Kit; Eisenberg (F)	.64	Oct.	58
Citizens Band			
Radio, Heath CB-1	62	Oct.	69
Radio, Heath CB-1 Walkie-Talkie (Springfield			
Enterprises)	37	June	59
Educational, Heath	90	May	60
Intercom			
Heath Transistor	62	Apr.	60
Knight Ranger Radio-Intercom	62	Oct	60
Kit Builders Get Together (F)	32	Jan	60
Kit Builders Get Together (F) Marine Inverter, Heath	61	May	58
Photoelectric Eye, Lafayette			50
KT_133	74	Sent	58
Power Supply, EICO 1020	- 11	ocpt.	00
Transistor	102	Inn	60
Radio	102	Jan.	UU
Knight Clock Padia	02	E-L	co
Knight Clock Radio Knight 5-Transistor Portable	.32	reb.	UU
Kinght 3-1 ransistor Portable	02	NOV.	38

Lafayette KT-123 Sun Powered	.90 Apr. 60
RC for Model Planes, Citizenship	
Shortwave Listener Kits (F)	79 Nov. 59
Tachometer, Heath TI-1	81 July 59
Teach Electronics, Kits That (F)	29 Dec. 60
Test Equipment	
Electronic Lab; Knight	84 July 58
Resistor Capacitor Box, EICO	
1140	84 Dec. 58
Signal Generator, Arkay SG-3	88 Sept. 60
Signal Tracer, Knight	80 Dec. 59
Tube Checker, EMC 301	84 Oct. 58
Tube Tester, Precise 111-K	79 Apr. 59
Voltohmyst, RCA	58 Feb. 59
VOM Multitester, Knight	84 Aug. 59
VTVM, Paco V-70	58 Feb. 59
Transistor Workshop, Knight	84 July 58

#### MEDICAL ELECTRONICS (F)

Add Years to Your Life:	
Atkinson	76 Apr. 59
Blood Pressure Electronically	76 Dec. 59
Cold Bugs, Tracking; Atkinson	99 Mar. 60
Electronics in Medicine	42 July 58
Electronics Tracks Ills	27 May 58
Hayfever; Atkinson	58 Sept. 59
Heart, Inside Your; Hoefler	63 Jan. 59
Hospital, Electronic	68 Dec. 60
Industry's Top Scientists	42 Sept. 58
Life, Electronics Explores;	
Atkinson	38 Dec. 58
Medical Inventions	68 Aug. 59
Microwave Hazards	82 Jan. 60
Pain, Electronics Fights; Busse	105 May 60
Polygraphy Measures Emotions;	
Law	56 Nov. 60
Rat in Electronic Cage	74 Mar. 59
Surgery of the Future	51 Aug. 60
Toothbrush, How Good is Your	37 Dec. 58
TV Top Hat for Doctor	86 Sept. 59
Transistorized Lung	77 June 60
Voices, They See; Unger	48 Dec. 58
Wired for Sleep	52 Oct. 59

#### MILITARY ELECTRONICS (F)

Air Arm Has Long Reach;	
Zuckerman 32 Jan	59
Blueprint for Defense; Beame 23 July	58
Electronic Countermeasures;	
Julian 54 July	58
Loran Lights the Way; Gibbs 47 Feb.	60
Mobile Command Post 86 Mar.	60
Radar Maps 47 Sept.	
Sferics Stations Sound Out Storms;	
Gubitz 104 Apr.	60
Snooperscope, See in the Dark57 July	59

#### MISCELLANEOUS PROJECTS

Armstrong Oscillator (C)	56	June	60
Batteries, New Life; P. Hertzberg			
(C)	84	Jan.	59
BC Oscillator (C)	.84	Mar.	60

Bell Light (C) 48 Oct. 60 Breadboard, Experimenters; Pollack
Breadboard, Experimenters; Pollack
(C) 68 May 39
Cable Adapter, Universal;
Trauffer (C) 100 Feb. 60 Chassis, Prepare; Buckwalter (C) 58 Apr. 59
Chassis, Prepare; Buckwaiter (C) 59 Dog 60
Child's Phonograph (C) 52 Dec. 60 Component Value (F) 83 May 59
Component value (r) 65 May 35
Component Value (F) 63 May 35 Control Center, Experimenters: Benrey (C) 72 Apr. 59 Converting Line Voltage (C) 63 Dec. 58 Copper Plating; P. Hertzberg (C) 68 Jan. 59 DC Conversion (C) 60 July 60 DC Conversion Conceptor (C) 74 July 59
Converting Line Voltage (C) 63 Dec 58
Copper Plating: P Hertzherg (C) 68 Jan 59
DC Conversion (C) 60 July 60
DC from Bike Generator (C) 74 July 59
DC Power Supply for Shaving:
Kaye (C) 98 May 60 Deodorizer, Electronic; Wortman
Deodorizer, Electronic; Wortman
(C) 98 Sept. 60 Electronic Projects, Sell Her on Your: Kohler (F) 68 Apr. 59
Electronic Projects, Sell Her on
Your; Kohler (F) 68 Apr. 59
Fingertip Switching; Pollack (C) 29 May 60
Your; Kohler (F) 68 Apr. 59 Fingertip Switching; Pollack (C) 29 May 60 Fire Alarm; Goodman (C) 50 Mar. 60
FILE Mailli, Fullack (C)
Fire Alarm Dials Telephone; Diers
(C) 52 Jan. 59 Fluorescent Starters, Other Uses;
Pollack (C) 73 Aug 50
Pollack (C) 73 Aug. 59 Footswitch, Handy; D. Gordon (C) 80 June 60
Hot Dog Cooker: Buckwalter (C) 29 July 60
Hot Dog Cooker, Buckwalter (C) 29 July 60 Invisible Switch, Pollack (C) 72 July 58
Isolation Transformer (C) 84 Apr. 60
Label your Equipment; Goodman
(C) 99 Jan. 60 Lawn Sprinkler; Wels (C) 66 Sept. 58
Lawn Sprinkler; Wels (C) 66 Sept. 58
also AS Sent 60
Lie Detector; Kolbe (C) 32 Aug. 60
Lie Detector; Kolbe (C) 32 Aug. 60 Light Powered Relay (C) 74 June 59
Light Switch (C) 83 May 59
Line Voltage, Watch Your; Sands
(C) 73 Dec. 60 Lock, Electronic Combination;
Wilensky (C) 70 Mar. 59
Metal Etcher: Anderson (C) 66 Sept 59
Metal Etcher; Anderson (C) 66 Sept. 59 Metal Locator; Pollack (C) 32 Sept. 59
Meter for Metal Locator (C) 86 Feb. 59
Mine Detector Range, Increasing
(C) 83 May 59
Negative Polarity (F) 94 Sept 60
Neon Bulb Oscillator (C) 86 Mar. 59
Neon Flasher (C) 54 May 60
Neon Flasher (C) 54 May 60 Oven Thermometer; Hahn (C) 53 June 60
Photo Target, Game; Winklepleck
(C) 36 Dec. 59
Play it Safe; R. Hertzberg (C) 92 July 58
also 88 Oct. 60
Polarize Your Plugs; R. Hertzberg
(C) 79 July 59 Power Pack for HO Trains (C) 69 May 58
Power Supply/Converter
Power Supply/Converter 1-Transistor: Winklepleck (C) 64 Oct 60
1-Transistor; Winklepleck (C) 64 Oct. 60 Power Supply Conversion (C) 94 Feb. 60
Power Supply, Transformerless (C) 48 Oct 60
Power Supply, Transformerless (C) 48 Oct. 60
Printed Circuit, Make a (C) 33 Oct. 59
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59 Roulette Wheel, Electronic (C) 40 Dec. 60
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59 Roulette Wheel, Electronic (C) 40 Dec. 60 Silver Plating (C) 82 Apr. 59
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59 Roulette Wheel, Electronic (C) 40 Dec. 60 Silver Plating (C) 82 Apr. 59 Skywatcher; Pollack (C) 72 Nov. 58
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59 Roulette Wheel, Electronic (C) 40 Dec. 60 Silver Plating (C) 82 Apr. 59 Skywatcher; Pollack (C) 72 Nov. 58 Solder, How to: Craig (C) 84 May 58
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59 Roulette Wheel, Electronic (C) 40 Dec. 60 Silver Plating (C) 82 Apr. 59 Skywatcher; Pollack (C) 72 Nov. 58 Solder, How to; Craig (C) 84 May 58 Soldering Iron Stand; Kaye (C) 106 July 60
Power Supply, Transformerless (C) 48 Oct. 60 Printed Circuit, Make a (C) 33 Oct. 59 Rectifier (C) 74 July 59 Roulette Wheel, Electronic (C) 40 Dec. 60 Silver Plating (C) 82 Apr. 59 Skywatcher; Pollack (C) 72 Nov. 58 Solder, How to: Craig (C) 84 May 58

Sun-Powered Motor; Garner (C)69 Nov.	58
Telephone Amplifier; Hahn (C) 87 Mar.	60
Telephone Bell, External; Benrey	
(C) 42 July	60
Temperature Control (C) 80 Sept.	58
Thermometer, Electronic;	
Hahn (C) 51 May	
Time Delay Switch; Ives (C) 49 Feb.	59
Timer, Electronic (C) 86 Mar.	59
Transformer, Choosing (F) 93 Aug.	60
Transformer Leakage (F) 61 Dec.	
Transistors (F) 82 July	58
Travalarm; Paul (C) 80 July	58
Tube Leakage (F) 63 Dec.	
Underwater Metal Locator	
Modification (C) 93 Aug.	60
Ventriloquism, Electronic (C) 63 Dec.	60
Voice Actuated Switch; Pollack (C) 52 Mar.	59
Voice Control Model Trains (C) 36 Dec.	
Voltage Regulator (F) 52 Nov.	59
Walkie Talkie (F) 60 July	60
Weather Station; P. Hertzberg (C)	
Wind Velocity Meter 85 May	59
Wind Direction Indicator 56 June	59
Humidity Indicator 59 July	59
Electronic Thermometer 70 Aug.	59
Wire Connections Made Easy;	
D. Gordon (C) 92 Aug.	
Wire Shielded Cables; Rocke (C)96 Mar.	60

#### MUSIC

Electronic Music, New Age of (F).		Nov.	
Electronic Rhythm (F)	64	July	60
Guitar Amplifier; Pollack (C)	64	Dec.	58
Harmonica, Electronic; Benrey (C)	76	July	59
Lights that Twinkle to Music;		-	
Wortman (C)	.34	Jan.	59
Metronome; Pollack (C)	56	Feb.	59
Organ, All-Transistor; Maynard			
(C)	65	Mar.	60
Stalactite Organ (F)	.52	Sept.	60
Theremin, Transistorized; Benrey			
(C)	44	Aug.	60
		0	

#### NEW ADVANCES (F)

Airborne Brain	92 May 59
Antarctic Trailblazer	
Brains for Trains; Howard	62 Sept. 60
Clock, Cosmic	86 Dec. 60
Clock, Unique Electronic	
Compactron	55 Dec. 60
Crime Lab; Nanas	46 Mar. 59
Desert into Oasis; Unger	
Electronic Blazes Trail	53 July 60
Exploding Wire	41 June 60
FAX, All About; Matthews	33 Mar. 60
Fuel Cell	81 Feb. 60
Gondola Up a Mountain	
Gun-Jumpers Beware	92 May 60
How Fast is Your Draw	56 May 59
Infrared, New Wonder Tool	52 July 59
Light Amplifier	42 Oct. 60

F—Feature Articles
C—Build-it Projects

[Continued on page 94]

Masers, Those Amazing; Renne	64 Feb. 59
Miniaturization is Big; Mandell	52 June 59
Mutes May Speak	102 Mar. 60
Nuvistor, Introducing	62 June 59
Oil with Electronics; Joseph	46 Aug. 59
Paychecks by Microwave	87 Sept. 60
Pinspotter, Electronic	50 Apr. 59
Police use Pocket Radio	44 Dec. 58
Printed Circuit Primer	29 Oct. 59
Remote Control Dog Trainer	115 July 60
Rescue Dog Uses Radio	46 Oct. 58
Skyways of the Future; Gubitz	40 Aug. 60
Sleep-Learning, All About;	-
Eisenberg	42 Mar. 60
Solid Circuit	86 Jan. 60
Speeding the News, Toffler	50 Dec. 58
Soviet Show in New York	32 Aug. 59
Sun Power, Coming Age; Joseph	27 Apr. 59
Super-Cold Electronics; Delman	32 July 60
Thermoelectricity; Delman	27 Sept. 59
Transistors, What's New With	80 Aug. 59
Transmitter, Crash Position	46 May 59
Tubes, New Look in	81 Feb. 59
Underwater Metal Detectors;	
Ciampi	27 July 59
Weather, UHF in a Balloon	78 Sept. 59

#### **PHOTOGRAPHY**

Camera, Electronically Tripped (F) .84 July 59
Cash in a Flash; Joseph (F) 34 May 60
Exposure Meter for Enlarger;
Pollack (C) 64 June 59
Film Processing, Color; Nathan (F) 92 Jan. 59
Flash, Transistor Electronic (F) 94 May 58
Light Switch; Automatic (C) 78 July 60
Magnifies Time (F) 68 Sept. 60
Movie Camera with Brain (F) 81 May 58
Photo-Enlarging Meter; Garlick
(C)
Photo-Flash, Transistor Slave:
Winklepleck (C) 79 Oct. 58
Photofloods, Flash Your;
Gephart (C) 44 Feb. 60
Photo Light Bar; Landsman (C) 72 July 60
Picture Taking, Revolution in (F) 65 July 60
Sound Movies at Home; Zuckerman
(F) 82 Sept. 59
Sound to your Movies; Zuckerman
(F) 60 Dec. 58
Speedlight, Revive your; Anderson
(F)
Strobe Slave; Garlick (C) 75 July 60
Time-Counter for Darkroom;
Pollack (C) 49 Jan. 59

#### RADIO CONTROL

See also Kits	
Garage Door Opener, Install	
R/C (C) 27 Aug.	59
Garage Doors, Push Button; Joseph	
(F) 34 Apr.	60
Guided Missile, First; Gregory (F) 54 Dec.	59
Model Radio Control; Del Gatto	
(F) 40 Sept.	60
R/C Duck Decoy; P. Hertzberg (C) 67 Nov.	59

R/C Ferry Boat; Winter (C, P)38 May R/C Hobby Extraordinary;	<b>5</b> 9
Winter (F) 34 May	58
R/C Models, How to Wire;	
Winter (C) 42 Apr.	60
R/C Model Airplane Record (F)66 Nov.	58
R/C Rod and Reel; Lynch (F)50 July	60
Radio Garage Door Opener;	
Lorenz (C) 44 May	58
WW1 Fokker; Musciano (C, P)36 Apr.	60
Thermo-trolled Submarine;	
Palanek (C) 48 Sept.	58

#### ROCKETRY-SPACE (F)

Amateur Missile, Outstanding36 Aug. 5	9
Amateur Rocketry; Nanas 38 Aug. 5	9
Amateur Rocketry, America's;	
Mallan 48 Nov. 6	0
Amateur, Skilled Rocket; Brinley 48 Dec. 6	0
Build a Safe Model Missile; Parkin	
(See Courses)	
Careers in Astronautics; Mallan 87 July 5	8
Cosmic Clearing House; Mallan34 June 6	0
Electronic Countermeasure; Julian 54 July 5	8
Ion Fuel for Rockets; Beame 23 May 5	8
Race to Space; Stanbury 37 Oct. 5	9
TV to Circle Globe; Johnson 68 July 5	8
X-15; Gubitz 40 Dec. 5	9

#### SCIENCE FAIR

Jacob's Ladder; Pollack (C) 42 Nov. 60
Reaction Time Tester; Pollack (C)50 Oct. 60
Science Fairs, Win at; Benrey (F)29 Oct. 60
Science Fair Winners; Gilmore (F) 32 Oct. 60
Science Fair Winners; Gilmore (F) 38 Nov. 60
Teenagers, Our Amazing; Bienstock
(F) 44 Jan. 59
Tesla Coil; Pollack (C) 54 Oct. 59

#### SHORTWAVE LISTENING

See also Kits, Amateur Radio and Courses
Adding Bandspread (Brain) 52 Sept. 59
Airport Monitor; Zeluff (C) 50 Aug. 59
Antenna for DX (Brain) 84 Mar. 60
Antenna Tuner; Smith (C) 42 Feb. 60
Build-it-6 (Detector for SWL) (C) 84 Feb. 60
DX from "Treasure Island":
Stanbury (F) 84 Oct. 60
DX, Radio Beacons; Stanbury (F)85 Dec. 59
DX Underwater; Stanbury (F) 94 Nov. 60
QSL Quarrel; Hoover (F) 28 June 60
Shortwave Listening, All About; Stanbury (F) See Courses
Shortwave Listening, All About; Stanbury (F) See Courses
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown;
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59 Shortwave's Taboo, Cracking;
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59 Shortwave's Taboo, Cracking; Stanbury (F) 60 Sept. 59
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59 Shortwave's Taboo, Cracking; Stanbury (F) 60 Sept. 59 SW Antenna (C) 86 Feb. 59
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59 Shortwave's Taboo, Cracking; Stanbury (F) 60 Sept. 59
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59 Shortwave's Taboo, Cracking; Stanbury (F) 60 Sept. 59 SW Antenna (C) 86 Feb. 59 SWL Around the World; Hertzberg and West (F) 36 July 58
Shortwave Listening, All About; Stanbury (F) See Courses Shortwave Radio, VHF-Hometown; Craig (F) 70 Apr. 59 Shortwave's Taboo, Cracking; Stanbury (F) 60 Sept. 59 SW Antenna (C) 86 Feb. 59 SWL Around the World; Hertzberg

#### Continued next month

#### SIXTEEN-PAGE SPECIALS

ABC's of Electronics (F)	65	Mav	60
Boat Electronics, Small (F)			
	65	Jan.	60
Loudspeakers and Enclosures			20
(-, -,	7.	Nov.	60
Novice Ham Station; Buckwalter (C) 6	9 9	Sept.	60
Organ, All-Transistor; Maynard	J .	Jept.	00
	5	Mar.	60
Power Supplies, Build and Design;			
		Feb.	_
	65	July	60
Schematic Diagrams, How to Read;	0.5	<u> </u>	-0
		Oct.	
TV, How to Fix Your (F)	00	Apr.	00

#### TAPE RECORDING

See also Kits			
Electronic Age School (F)	.64	Mar.	59
Prerecorded Hi-Fi Tape (F)		Jan.	_
Sleep-Learning; Eisenberg (F)			
	-		
	.04	Sept.	39
Sound to your Movies, Add;		_	
Zuckerman (F)		Dec.	-
Tape Cartridges; Eisenberg (F)	.38	Mar.	59
Tape Cartridge Player (F)	.36	May	59
Tape Cutoff; Wayland (C)	.60	Sept.	58
Tape off the Air (C)	.31	May	59
Tape Recorder, Improve Your;			
	72	Dec.	50
Tape Recorder, How to Buy (F)			
Tape Recorder Interference (Brain)	94	Feb.	60
Tape Recorder on Vacation;			
Gorman (F)	.64	Aug.	59
Tape Recorder Tune up; Comstock		-	7
	104	July	60
Tape Recorders, New Tiny (F)			
		Feb.	
	.34	reb.	JJ
Telephone Recording Beeper;	-0	-	
Frye (C)		Dec.	
\$50 Tape Recorder (F)	90	Sept.	58
Tape Tricks; Zuckerman (F)	.62	Nov.	60
VU Meter, Add a; Kolbe (C)	49	June	60

#### TELEVISION

Antenna for Channel 3-5 (C)	62 Jan. 59
Antenna Hints (C)	.83 May 59
Antenna, How to Install (C)	.36 July 59
Antenna Matching (C)	82 Apr. 59
Battery Operated TV Sets (F)	30 Aug. 60
Camera Tube, Sensitive TV (F)	57 Apr. 60
Conventions, 1960 Political (F)	25 Aug. 60
Educational TV; Gregory (F)	27 Jan. 59
Headphones for TV (C)	84 Nov. 58
Hi-Fi Sound from TV; Wynn (C).	43 Apr. 59
Interference Filter, TV (C)	.52 Nov. 59
Picture Tubes, Rebuilt; Delman	
(F)	.59 Nov. 59
Portable, Transistor TV (F)	34 Nov. 59
Repairs, TV	
Fix Your TV Set; Herrick (F)	63 Nov. 58
Fix Your TV Set; Greenberg (F)	.81 Dec. 58

Fix Your TV (F)	65	Apr.	60
Picture Tube, Change Your (C)			
Tubes, Check Your TV;			
Herrick (C)	72	Oct.	58
TV Overload, Eliminate (C)	86	May	60
Screen, World's Smallest TV (F)	82	Mar.	60
Station, World's Smallest TV			
R. Hertzberg (F)	.40	May	58
Tape Takes to Road, TV (F)			
Torture Test (F)	.82	June	60
TV Around the World; Frieborn			
(F)	88	Feb.	60
TV in Your Car (F)			
TV Inputs (C)			
TV Over the Horizon; Hindley (F)	78	Aug.	59
TV, Report on Community (F)			
TV to Circle Globe; Johnson (F)			
TV, New Look (F)	41	Oct.	58
TV Top Hot for Doctor (F)			
TVI, What You Can Do About;		•	
Smith (C)	40	Oct.	60

#### TEST EQUIPMENT

See also Courses and Kits	
Alignment Generator CB;	
Cohen (C)	47 Aug. 60
Cohen (C) Ammeters, How to Check (Brain)	61 Dec 59
Cable Adapter Universal	01 Dec. 33
Trauffer (C)	100 Feb 60
Cable Adapter, Universal; Trauffer (C) Capacitor Checker, Electrolytic;	100 F CD. 00
Winklepleck (C)	81 Aug. 60
Check Your RPM's; Wayland (C)	65 Sont 58
Galvanometer (Brain)	86 Mar 59
Ham Station Monitor; Doherty (C	) 57 Oct 58
Hi-Fi Tester; Pollack (C)	64 Apr 59
Meter, Protect Your; Winklepleck	04 Apr. 33
(C)	60 Mar. 59
Ohmmeter Circuit (Brain)	92 Oct 50
Power Indicator, CB; Hollander	02 Oct. 39
(C)	22 Tuno 50
(C) Probes, Make Your Own;	June Ja
Rocke (C)	56 Feb. 60
Rocke (C) Protect Your Meter; Winklepleck	Jo Feb. 00
(C)	.60 Mar. 59
(C) Radio-TV Troublefinder;	00 Wan. 39
P. Hertzberg (C)	92 Nov. 50
PF Field Indicator Pollage (C)	01 Tul. 60
Signal Congretors: Fisanbarg (F)	58 Oct 50
RF Field Indicator; Pollack (C) . Signal Generators; Eisenberg (F) Signal Pencil; Winklepleck (C)	74 June 60
Stop That Capacitor Leak:	14 June 00
Wayland (C)	06 1.1. 60
Wayland (Ĉ) Test Bench Control Panel;	96 Јшу 60
Johnson (C)	50 Cant 60
Johnson (C) Test Equipment Theory (See Cou	Sept. ov
Test Equipment Theory (See Cou	rses)
Test Instrument, 39c; Stanley (F)	16 Dec. 58
Transistor Tester (F) Transistor Tester; Benrey (C)	02 May 38
Transistor Tester; Benrey (C)	48 May 60
Voltmeter, Electrostatic (Brain)	56 June 60
	00 T1 FO
VTVM Theory (F)	82 July 58
Wattmeter, Wide Range; Jurgen (C)	82 July 58

F—Feature Articles C—Build-it Projects Brain—Electronic Brain

#### Electro-Magic in March El

94

# El's 1961 Index

F—Feature Articles.

C—Construction Projects.

Name following title is author.

Page number follows date.

					Stereo Straight to Your			
AMATE	UR RADIO				Ears; Tape Recorder Accessories;		(Dr.) (F)	Nov70 May56
					Tape Switch, Automatic; Tape, Take Care of Your;	Wayland	(C)	Feb70
Antenna, Tune Your;	Pyle		Feb.		Tape, Take Care of Your; Tape to Turntable	Eisenberg Maizel	(F) (F)	July65 Mar52
Bandswitching Wavemeter; Base Insulator;	Pyle Pyle	(C)	Apr July .		Tape to raintable		4. 1	
CB to Ham;	R. Hertzberg			71				
Crystal Calibrator, Dual		(0)	N1	40	AUTO	MOTIVE		
Frequency; Getting on the Air;	Friedman P. Hertzberg	(C)						
Ham, High-Flying;	R. Hertzberg				Alternators, All About; Engine Analysts;	Gilmore	(F) (F)	Sept97
Ham Rig, Tag-Along;	Pyle	(C)	July .	62	FM Tuner For Car;	Buckwalter	(0)	May94 July29
Ham Shack, Power Wiring for:	P. Hertzberg	ICI	May	E1	Temperature Gauge, Add a:	Kolbe		
High-Frequency Communi-		(0)	May .		Add a,	KOIDE	(0)	July53
cations: They Said It								
Could Be Done;		(F)			BOA	TING		
Microphone Desk Stand; Old Timer, Memories of an;	Trauffer	(C) (F)	Mar Mar					
Oscillator-Amplifier, Code		(17	Mar	,74	CB, Install on Your Boat;	Smith	(F)	May78
Practice;	Pafenberg	(C)			Marine Band Converter;	Buckwalter		Apr36
Shielded Dummy Load, A;			Mar		Radio Direction Finders: They Show You the Way			
Talking Clock;	Rivman	(C)	Sept	52	to Go Home;	Lenk	(F)	Sept46
ATOMIC ENERGY	AND RADIA	TIO	N (F)		0.000	-DC (E)		
					CARE	ERS (F)		
Light-Amplifier								
	Rosa		Jan	40	Discs, Dollars From; Electronics: Should You Go	Joseph		Feb78
Prospecting Tool, "Hot" New;	Adams		Feb	42	West?	Joseph		Nov66
(dew.)	- dains		reb	72	Lie Detective; Tape Recorder Doctor;	Joseph Joseph		May75 Feb58
					Tech Writer, Your Career	Josebii		
ΔΙ	IDIO							
A	JDIO				As a;	Kyle		Apr86
Bass-Treble Booster for	JDIO					Kyle		Apr86
Bass-Treble Booster for Your Radio;	Sands		Feb		As a;	Kyle		Apr86
Bass-Treble Booster for Your Radio; "Efficiency"	Sands		Feb		As a;			Apr86
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver,	Sands	(Dr.)	Feb	54	As a;	NS BAND	(C)	
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation	Sands H. Cohen	(Dr.) (C)	Feb Jan	54	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie	NS BAND		May31
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your;	Sands H. Cohen D. Horowitz	(Dr.) (C) (C)	Feb Feb	54 82 74	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette);	NS BAND	(F)	May31 May53
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your; FM Tuner for Car;	Sands H. Cohen D. Horowitz Buckwalter	(Dr.) (C) (C)	Feb Jan	54 82 74	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB TO Ham;	Kolbe  Kolbe R. Hertzberg	(F) (C) (F)	May31 May53 Apr62 July71
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your;	Sands H. Cohen D. Horowitz	(Dr.) (C) (C)	Jan Feb July	54 82 74 29	CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor;	NS BAND  Kolbe	(F) (C) (F)	May31 May53 Apr62
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen,	(C) (C) (C)	Jan Feb July Mar	54827429	CITIZES  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized;	Kolbe  Kolbe R. Hertzberg	(F) (C) (F) (C)	May31 May53 Apr62 July71
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer	(Dr.) (C) (C) (C) (C) (C)	Feb Feb July Mar Mar	54 82 74 29 29	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie {Lafayette}; CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From	Kolbe Kolbe R. Hertzberg Friedman	(F) (C) (C) (C) (C)	May31 May53 Apr62 July71 Feb50 Sept38
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon	(Dr.) (C) (C) (C) (C)	Feb  Jan  Feb  July  Mar  Mar  Feb	54 82 74 29 29 40	CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB;	Kolbe  Kolbe R. Hertzberg Friedman Pollack Friedman Buckwalter	E0E0 0 EE	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman	(Dr.) (C) (C) (C) (C) (C) (C) (C)	Feb  Feb July  Mar  Mar  Feb  Nov	54 82 74 29 29 40 86 64	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Roceiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch;	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman Pollack Friedman Buckwalter Goodman	(F) (C) (F) (C) (F)	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72 Nov82
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella	(Dr.) (C) (C) (C) (C) (C) (C) (C)	Feb Jan Feb July Mar Mar Feb Nov Jan	54 82 74 29 40 86 64	CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB;	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman Pollack Friedman Buckwalter Goodman	E0E0 0 EE	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman	(Dr.) (C) (C) (C) (C) (C) (C) (C)	Feb  Feb July  Mar  Mar  Feb  Nov	54 82 74 29 40 86 64	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes; Ruggedize Your Rig;	Kolbe  Kolbe R. Hertzberg Friedman Pollack Friedman Buckwalter Goodman Kneitel	FOFO O FFOF	May31 May53 Apr62 July17 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverberation: The "Reverberation: The	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C)	Feb Jan Feb July Mar Mar Feb Nov Jan	54 82 74 29 40 86 64 50 67	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalter Goodman Kneitel	FOFO O FFOF	May31 May53 Apr62 July17 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement,	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb  Jan  Feb  Mar  Mar  Feb  Jan  Jan  Ján	54 82 74 29 29 40 86 64 50 67	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;	Kolbe  Kolbe R. Hertzberg Friedman Pollack Friedman Buckwalter Goodman Kneitel	FOFO O FFOF	May31 May53 Apr62 July17 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection);	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb  Jan  Feb  Mar  Feb  Nov  Jan  Feb  Ján  Feb	54 82 74 29 40 86 64 50 67 32	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes; Ruggedize Your Rig; TV Interference;	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalter Goodman Kneitel Kneitel	FOFO O FFOF	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44 Feb62
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speakers, Multiple; Speakers, Multiple; Speaker Power;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb  Jan  Feb  Mar  Mar  Feb  Jan  Jan  Ján	54 82 74 29 40 86 64 50 67 32	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalter Goodman Kneitel Kneitel	FOFO O FFOF	May31 May53 Apr62 July17 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, 'Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speakers, Multiple; Speaker Power; Stereo, Second Thoughts	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Stelm	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb Jan Feb Mar Feb Jan Jan Feb Ján Feb Ján	5482742929408664506732534874	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO); EM Transceiver (EICO);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalfer Goodman Kneitel Kneitel	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44 Feb62
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speaker, Multiple; Speaker Power; Stereo, Second Thoughts on; I-IV;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb Feb Mar Mar Feb Jan Feb Ján Feb Ján AprSe	5482742929408664506732324874	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO); EM Transceiver (EICO);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalfer Goodman Kneitel Kneitel	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44 Feb62
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speakers, Multiple; Speaker Power; Stereo, Second Thoughts on; I-IY; Stereo FM;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Stelm	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb Jan Feb Mar Feb Jan Jan Feb Ján Feb Ján	5482742929408664506732324874	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO); EM Transceiver (EICO);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalfer Goodman Kneitel Kneitel	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44 Feb62  Apr71 Mar77 Sept67 Nov29
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speaker, Multiple; Speaker Power; Stereo, Second Thoughts on; I-IV;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb Jan Feb Mar Feb Jan Feb Jan Feb Ján Feb AprSe Sept	54827429294086645067324874	CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO); EM Transceiver (EICO);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalfer Goodman Kneitel Kneitel	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept82 Nov72 Nov82 Apr44 Feb62  Apr47 Sept67
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speaker Power; Stereo, Second Thoughts on; I-IV; Stereo FM, Adaptors, Circuits For; Stereo Headphone	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm Stern Milder Kolbe	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (F) (C) (Dr.) (Dr.) (F) (F)	Feb Jan Feb Mar Feb Jan Feb Ján Feb Ján AprSe Sept Nov		CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO); EM Transceiver (EICO);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalfer Goodman Kneitel Kneitel	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept38 Sept82 Nov72 Nov82 Apr44 Feb62  Apr71 Mar77 Sept67 Nov29
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speakers, Multiple; Speaker Power; Stereo, Second Thoughts on; I-IV; Stereo FM; Stereo FM Stereo FM Stereo Headphone Adaptor;	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Stern	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (F) (C) (Dr.) (Dr.) (F) (F)	Feb Jan Feb Mar Feb Jan Feb Jan Feb Ján Feb AprSe Sept		CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalfer Goodman Kneitel Kneitel	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept82 Nov72 Nov82 Apr44 Feb62  Apr71 Mar77 Sept67  Nov29 Feb34 July85 May71
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speaker Power; Stereo, Second Thoughts on; I-IV; Stereo FM, Adaptors, Circuits For; Stereo Headphone	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm Stern Milder Kolbe Kolbe	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb Jan Feb Mar Feb Nov Jan Feb Ján Feb AprSe Sept Nov		CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman Pollack Friedman Buckwalter Goodman Kneitel Kneitel  EPORTS  D);  k, Arkay, EICC Frommes, Knigh Kardon);  zed (EICO);  IV (Harma (Knight-Kit);	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept82 Nov72 Nov82 Apr44 Feb62  Apr44 Feb62  Apr44 Feb62  Apr44 Feb62  Apr44 Feb62
Bass-Treble Booster for Your Radio; "Efficiency" FM Receiver, One-Transistor FM Tuner, Add Interstation Muting to Your; FM Tuner for Car; FM Wireless Microphone; Microphone Desk Stand; Microphone, Economy Directional; Microphone, Repair That; Record Changer, New Life for Your, I and II;  Reverberation: The "Reverb"; Speaker Leads (Placement, Appearance, Protection); Speakers, Multiple; Speaker Power; Stereo, Second Thoughts on; I-IV; Stereo FM; Stereo FM Adaptors, Circuits For; Stereo Headphone Adaptor; Stereo Headphones,	Sands H. Cohen D. Horowitz Buckwalter H. Cohen, D. Gordon Trauffer Stella Herman Salm Stern Milder Kolbe	(Dr.) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Feb Jan Feb Mar Feb Jan Feb Ján Feb Ján AprSe Sept Nov		CITIZEI  CB Converter, Piggy Back; CB Handie-Talkie (Lafayette); CB Receiver, 2-Transistor; CB To Ham; CB Tuning Adaptor; Field Strength Meter, Transistorized; Mobile Whip, More From Your; New Rules for CB; Tone Call/Squelch; Tubes: Ruggedize Your Rig; TV Interference;  KIT RI  AM-FM Stereo Tuner (PACC CB Handi-Talkie (Heath); CB Transceiver (EICO); FM Tuner Kits (Radio Shac Heath, Lafayette, PACO, G Kit, Dyna, Scott, Harman- Grid Dip Meter (EICO); Portable Radio, Transistoris Receiver, KT-200 (Lafayette) Stereo Preamp: Cifation Kardon);	Kolbe  Kolbe  Kolbe R. Hertzberg Friedman  Pollack Friedman Buckwalter Goodman Kneitel Kneitel  EPORTS  D);  k, Arkay, ElCo Frommes, Knigh Kardon);  zed (EICO);  i IV (Harma (Knight-Kit); f(c); eath);	E00E0 0 EE0EE	May31 May53 Apr62 July71 Feb50 Sept82 Nov72 Nov82 Apr44 Feb62  Apr71 Mar77 Sept67  Nov29 Feb34 July85 May71

# El's 1961 Index

Courier Communications Satellite; Computers: Indispensable Birdbrains, The; Water Trails, 4800 WPM via; 'Moon, To the'; Phototape, New Satellite TY Recorder; Signals From Space (Josophere Beacon);  Converter (19 Meters); Stoner Converter (19 Mete	MEDICAL ELEC	CTRONICS (F	)	Trouble-Shooting Tech- niques on Transistor Radios;	Klein	Sept62
MUSIC  Mi-Fi Record Guide; De Motte (F) Sept. 49 Nov. 91  Crgan, Transistorized Chord; Maynard (C) May. 40 Nov. 91  PHOTOGRAPHY (C) Jan. 56  Phototoge, New Stellite, Google, Google, Jan. 56  Birdbrains, The; Mallan Feb. 27  Computer: Indispensable Birdbrains, The; Maynard (Computers: Indispensable Birdbrains, The; Maynard (Computers) The Computers (Compu	Brain Surgery by		74000	FEATURE	ARTICLES	100
Mi-Fi Record Guide; De Motte (F) Sept. 49   Nov. 91	INCOMES TAXABLE PROPERTY.	SIC	75.0	Antenna, 130-Mile;	ğ-	Sept61
Hi-Fi Record Guide; De Morte (F) Sept. 49 Organ, Transistorized Organ, Transistorized Organ, Transistorized Organ, Transistorized Theremin, A Professional's; D. Horowitz (C) Jan. 56  PHOTOGRAPHY (C)  Darkroom Timer; Pollack Feb. 44  Rocketty AND SPACE (F)  Courier Communications Satellite; Computers: Indispensable Birdbrains, Thoe; WM Meteor Trails, 4800 WPM Meteo	Annual Visit of the Section 1		100	tions (Ultraviolet);		Apr50
Organ, Transistorized Chord: Theremin, A Professional's; D. Horowitz (C) Jan56  PHOTOGRAPHY (C)  Darkroom Timer; Garlick Peb44  Multi-Strobe, The; Pollack Mar50  ROCKETRY AND SPACE (F)  Courier Communications Satellite; Computers: Indispensable Birdbrains, The Mar54  Birdbrains, The Mar56  Brown New Satellite; Computers: Indispensable Birdbrains, The Mar58  Brown New Satellite; Computers: Indispensable Birdbrains, The Mar54  Dowell Mar58  Dowell Mar58  Rosa Feb31  Huber Jan44  Huber Jan45  Converter (49 Meters); Dyl45  Dy Satellites, How to; Stanbury (F) July44  Converter (49 Meters); Dyl. Satellites, How to; Stanbury (F) July45  Converter (49 Meters); Dyl. Satellites, How to; Stanbury (F) July45  Converter (49 Meters); Dyl. Satellites, How to; Stanbury (F) July45  Converter (49 Meters); Dyl. Satellites, How to; Stanbury (F) July45  Converter (49 Meters); Dyl. Satellites, How to; Stanbury (F) July45  Schedules, Keep Up With SWI, Sunday Satellite, How to; Stanbury (F) Mar46  Feb80  TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; Residue July85  Stanbury (F) Mar	711 71 71 71 71 71 71 71 71 71 71 71 71	De Motte (F)	Sept49 Nov91	Computer: B-70's Invisible	Lenk	
Theremin, A Professional's; D. Horowitz (C) Jan56  PHOTOGRAPHY (C)  Darkroom Timer; Galick Mar50  Multi-Strobe, The; Pollack Feb44  Multi-Strobe, The; Pollack Feb44  ROCKETRY AND SPACE (F)  ROUTIER Communications Satellife; Computers: Indispensable Birdbrains, The Birdbrains, The Birdbrains, The Rocked Trails, 8000 WPM Mar62  Robert Trails, 8000 WPM Mar62  Robert Trails, 8000 WPM Mar64  Meloor Trails, 8000 WPM Mar65  SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  Converter (49 Meters); Date of Rocked Mar65  Converter (49 Meters); Date of Rocked Mar65  Converter (49 Meters); Date of Rocked Mar65  Short Wheel; Computers: Indispensable Birth Research Controlled; Rocked Mar65  Rocked Mar65  SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  Converter (49 Meters); Date of Rocked Mar65  Short Wheel; Computer Mar65  Converter (49 Meters); Date of Rocked Mar65  Short Wheel; Converter (49 Meters); Date of Rocked Mar65  Converter (49 Meters); Date of Rocked Mar65  Converter (49 Meters); Date of Rocked Mar65  Short Wheel; Converted Mar65  Short Wheel; Communications Mar65  Short Wheel; Converted Mar65  Short Wheel; Converted Mar65  Short Mar66  Short Mar66  Short Mar67  Short Mar67  Short Mar67  Short Mar68  Short Mar68  Short Mar68  Short Mar68	Chard	Maynard (C)	May40	Computer: Army Brain		Apr56
PHOTOGRAPHY (C)  Darkroom Timer; Garlick Mar50  Multi-Strobe, The; Pollack Peb44  ROCKETRY AND SPACE (F)  ROUND AND A COLOR OF THE PROPERTY OF THE PR	Theremin, A Professional's;	D. Horowitz (C)	Jan56	Dust Control, Electronic;		Mar80
PHOTOGRAPHY (C)  Darkroom Timer; Garlick Pollack Feb. 44  Multi-Strobe, The; Pollack Feb. 44  Multi-Strobe, The; Pollack Feb. 44  Courier Communications Satellite; Computers: Indispensable Birdbrains, The; Refer Pollack Feb. 37  Computers: Indispensable Birdbrains, The; Robot Total Pollack Pol			_			May91
Darksom Timer; Garlick Mar. 50 Multi-Strobe, The; Pollack Feb. 44 With: Strobe, The; Pollack Feb. 44 With: Electronic; Magnetohydrodynamics; Magnetohydrod	PHOTOGR	APHY (C)		Ferrites:	Gilmore	May92
Multi-Strobe, The;  ROCKETRY AND SPACE (F)  ROSA Indianal Space (Computers: Indispensable Birdbrains, The; Rosa Feb. 31  Rote of Feb. 31  Rosa Feb. 32  Rosa Feb. 31  Rosa Feb. 32  Rosa				Giaever's Discovery;		Mar73
ROCKETRY AND SPACE (F)  Machine-Laught Electronic; Marconi, America's Own; July 89  Gourier Communications Satellites; Combrolled; Marconi, America's Own; July 89  Marcoli, Allian Alliant Allia				With:	Daniels	
ROCKETRY AND SPACE (F)  Machine-Faught Electronic; Marconi, America's Own; July 98  Apr. 15  Courier Communications Satellite; Marconi, America's Own; July 98  Mallan Steptonic Hubser Cased Nove 19	Multi-Strobe, The;	FOIIACK	100,	Larynx, Electronic;	Collins	July115 Jan31
ROCKETRY AND SPACE (T)  Communications Satellite: Computers: Indispensable Birdbrains, The; Metero Trails, 4800 WPM via; "Moon, To the"; Phototape, New Satellite TV Recorder; Signals From Space (fonosphere Beacon); Converter (49 Meters); DX Satellites, How to; DX Satellites, How to; DX Satellites, How to; Stanbury (F) July	-		THE STATE OF	Machine-Taught Electronics;		Apr33
Courier Communications Satellite; Computers: Indispensable Birdbrains, The; Water Trails, 4800 WPM via; 'Moon, To the'; Phototape, New Satellite TY Recorder; Signals From Space (Josophere Beacon);  Converter (19 Meters); Stoner Converter (19 Mete	ROCKETRY A	ND SPACE (F		Magnetohydrodynamics; Marconi America's Own:		July89
Courier Communications Satellite: Computers: Indispensable Birdbrains, The; Computers: Indispensable Birdbrains, The; Meteor Trails, 4800 WPM vie; "Moon, To the"; Phototape, New Satellite TV Recorder; Signals From Space (fonosphere Beacon); Converter (49 Meters); DX Satellites, How to; DX Satellit	ALCOHOLD IN COLUMN TWO			Motor, 150,000 rpm;		July98
Gomputers: Indispensable Birdbrains, The; Meteor Trails, 4800 WPM via; "Moon, To the"; Phototape, New Satellite TV Recorder; Signals From Space (Jonosphere Beacon);  Converter (49 Mefers); DX Satellites, How to; DX Satellites, Ho		Mallan	Feb27	the;		Sept87
Meteor Trails, 4800 WPM via; Whoon, To the"; Phototape, New Satellite TV Recorder; Signals From Space (Ionosphere Beacon);  Converter (49 Meters); DX Satellites, How to; DX Satellites, Houber Schoot, Our Amazing; Mallan July 98 Robots, Our Amazing;	Computers: Indispensable			Piaskin Electronics:	Haas	Nov92 Sept78
Dowell   Wall   Solar   Wall   Nov.   Standard   Stan	Birdbrains, The; Meteor Trails 4800 WPM	Kyle		Radar Astronomy, New		
School Student's; Wahl Nov. School Student's; Wahl July 76 School Student's; Robots, Our Amazing; Salt, Electricity From; Solar Wheel;	via;		Mar68 Feb 31	Celestial Art;	Huber	
SHORT-WAVE LISTENING  Short (C) Mar. 70  Solar Wheel; Sound, The Secret Power of; Solar Wheel; Sound, The Secret Power of; Sound, The Secret Power of, Sound, The Secret Power of, Sound, The Secret Power Pack, Camper (12v. Power Pack, Camper (12v. Power Pack,	Phototape, New Satellite	KOSA		School Student's;		Nov52
SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  SHORT-WAVE LISTENING  Converter (49 Meters); Stoner (C) Mar70 DX Satellites, How to; Stanbury (F) July94 DXing In Between (30-50 mc); Niceraguan Stations, Those Wild: Schedules, Keep Up With SWL; Tune In the World; TV DXer, Europe's Top; VLF: Incredible Basement of Radio;  Frequency Spotter, Crystal Controlled; RF Signal Generator (Transistorized); Kolbe Jan35 Stoner Mar45 Steed Mail Is Here; Speed Mail Is Here; Spread Mail Is Here; Surplus: Bargain Buys from Uncle Sam; Teaching Machines; Teachin	TV Recorder;	Huber	Jan44	Salt. Electricity From;		July98
SHORT-WAVE LISTENING  Speed Mail Is Here; Sun-Powered Lifesaver; Sun-Power Path Indiana Sunday Super Sunday Republic Sunday Sun	(lonosphere Beacon);		July14	Solar Wheel;	G. Byron	Sept64
Converter (49 Meters); Stoner (C) Mar70 DX Satellites, How to; Stanbury (F) July94 DXing in Between (30-50 mc); Common Meters (If) Apr82 DXing the Civil Air Patrol; Nicaraguan Stations, Those Wild; Schedules, Keep Up With SWL; Iten In the World; Ty DXer, Europe's Top; VLF: Incredible Basement of Radio; Kneitel (F) Nov86  TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; Stanbury (F) Mar65 TEST EQUIPMENT (C)  TEST EQUIPMENT (C)  Test Equipment (C)  Frequency Spotter, Crystal Controlled; Stanbury (F) Mar65 Ty Patterner; Kolbe Jan34 Ty Patterner; Kolbe Jan34 Ty Patterner; Kolbe Jan34 Ty Patterner; Kolbe Jan34 Ty Patterner; Commineter; Kolbe Jan34 Ty Patterner; Commineter; Kolbe Jan34 Ty Patterner; VOM Battery Conversion; D. Gordon Feb80 Diode Polarities; Pollack Mar85 Electro-Magic; Electro				of;	D. Cale	May38
Converter (49 Meters); Stoner (C) Mar70 DX Satellites, How to; Stanbury (F) July94 DX Satellites, How to; Stanbury (F) Mar85 DX Stanbury (F) Mar81 TV Keeps an Eye on Ice; Mar70 Telephone, Vertical Dial; Tokeps an Eye on Ice; Mar71 Telephone, Vertical Dial; Tokeps an Eye on Ice; Mar70 Telephone (F) Mar81 Today; Tube Interpretation (F) Mar85 Today; Tube Interpretation (F) Mar85 Tubes, Oddball; Underground Radio Is News Again; Watch, A True Electronic; Watch, A True Electronic; Watch, A True Electronic; Watch, A True Electronic; Commercial Killer; Patrick Mar45 TEST EQUIPMENT (C)  Alarm, Appliance; Alarm, Appliance; Patrick Mar45 Stoner Mar45 Stoner Mar45 Stoner Mar45 Counter, General Purpose; Crystal Receiver, Souped Up; Fence Charger, Transistorized; Frantz Feb90 Counter, General Purpose; Crystal Receiver, Souped Up; Fence Charger, Transistorized; Frantz Fish Lure; Fis	SHORT-WAY	VE LISTENING		Sun-Powered Lifesaver;	Joseph	Feb81
DX Satellites, How to; DX Stanbury DX Satellites, How to; DX Stanbury St	O 1 (40 Moderal)	Stones (C	1 Mar70	Uncle Sam;	Joseph	
DXing In Between (30-50 mc):  DXing the Givil Air Patrol; Nicaraguan Stations, Those Wild: Schedules, Keep U With SWL; Tune In the World; Ty DXer, Europe's Top; VLF: Incredible Basement of Radio;  Frequency Spotter, Crystal Controlled; RF Signal Generator (Transistorized); Stereo Omnimeter; Ty Paterner; Stone Mar				Telephone, Vertical Dial;	1,1-11-1	July98
Diode Polarities; Electro-Magic; Typ Dkar And Practice  Wild: Schedules, Keep Up With SWI; Tune In the World; Typ Dkar, Europe's Top; VLF: Incredible Basement of Radio;  TEST EQUIPMENT (C)  TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; RF Signal Generator (Transistorized); Stereo Omnimeter; Typ Dkar Conversion; Typ Dkar Conversion; The Controlled of the Mar65  TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; RF Signal Generator (Transistorized); Stereo Omnimeter; Typ Atterner; Typ Attern				Ten-Pin. The (Tube);		Mar76
Wild; Schedules, Keep Up With SWL; Tune In the World; Trune In the World In the Fair In the Feb	DXing the Civil Air Patrol;	Kneitel (F	) Mar41	Tomorrow's Telephone	Maizel	May2
Seedules, Keep Stanbury (F) Jan	Wild:	Stanbury (F	) May50	Tube that Prints;	Daniels	Mar36
Tune In the World; TV DXer, Europe's Top; VLF: Incredible Basement of Radio;  Kneitel (F) Nov86  TEST EQUIPMENT (C)  TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; RF Signal Generator (Transistorized); Benrey (Transistorized); Benrey (Transistorized); Stereo Omnimeter; Kolbe (TV Patterner; Shields (TV Patterner)) (Transistorized; Shields (TV Patterner)) (TV Patterner) (TV Pattern	Schedules, Keep Up With	Kneitel (F	) Sept29	Tubes, Oddball;		
TEST EQUIPMENT (C)  TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; Stoner Mar65 RF Signal Generator (Transistorized); Stereo Omnimeter; Kolbe Jan34 TV Patterner; Shields July68 TV Patterner; Shields July68 TV Patterner; Shields July68 Feb80  THEORY AND PRACTICE  MISC. CONSTRUCTION PROJECTS  Mar45  Alarm, Appliance; Patrick Mar44  Commercial Killer; Patrick Mar44  Controlled; Stoner Mar45  Commercial Killer; Parker July5  Benrey Sept86  Chapel May60  Pollack Mar85  Electro-Magic; Electro-Magic; Electro-Magic; Electro-Magic; Electro-Magic; Pugh Mar45  Grommets, New Jobs For; Rocke May54  Partick Mar46  Scillator, Low Power; Parkick Maynard Nov  Power Pack, Camper (12v. Power Pack,	Tune In the World;			Again:	Lawson	
TEST EQUIPMENT (C)  Frequency Spotter, Crystal Controlled; Stoner Mar65 RF Signal Generator (Transistorized); Stereo Omnimeter; Kolbe Jan34 TV Patterner; Shields July68 TV Patterner; Shields July68 TV Patterner; Onversion; D. Gordon Feb80  THEORY AND PRACTICE  MISC. CONSTRUCTION PROJECTS  MISC. CONSTRUCTION PROJECTS  Alarm, Appliance; Patrick Mar4.4 Commercial Killer; Patrick Mar4.4 Controlled; Frantz Feb9 Commercial Killer; Parker July5 Electro-Majlight (Bicycle): Insect Killer; Frantz Feb80  THEORY AND PRACTICE  Diode Polarities; Electro-Magic; Pollack Mar85 Electro-Magic; Pugh Mar40 Electro-Magic; Pugh Mar40 Geommets, New Jobs For; Rocke May54  Growners, New Jobs For; Rocke May54  MISC. CONSTRUCTION PROJECTS  MISC. CONSTRUCTION PROJECTS  Mar45 Alarm, Appliance; Patrick Mar44 Commercial Killer; Patrick Mar44 Controlled; Patrick Mar45 Conmercial Killer; Patrick Mar45 Controlled; Patr	VLF: Incredible Basement			Water, At the art		
Frequency Spotter, Crystal Controlled; Stoner Mar65  RF Signal Generator (Transistorized); Stolbe Jan34  TV Patterner; Shields July68  TV Patterner; Shields July68  TV Patterner; Conversion; D. Gordon Feb80  THEORY AND PRACTICE  Alarm, Appliance; Patrick Mar44  Counter, General Purpose; Benrey Sept8  Crystal Receiver, Souped Up; Chapel May6  Fence Charger, Transistorized; Fish Lure; Flashing Taillight (Bicycle): Insect Killer; Metal Locator (Radiogizmo): Maynard Apr60  Pollack Mar85  Electro-Magic; Electro-Magic; Electro-Magic; Electro-Magic; Pugh May60  Grommets, New Jobs For; Rocke May54  Prover Pack, Camper (12v. Power Pack, Campe		Kneitel (1	-) Nov/3	THE RESERVE OF THE PARTY OF THE		NUMBER OF
Frequency Spotter, Crystal Controlled; Stoner Mar65 RF Signal Generator (Transistorized); Benrey Apr45 Stereo Omnimeter; Kolbe Jan34 TV Patterner; Shields July68 YOM Battery Conversion; D. Gordon Feb80  THEORY AND PRACTICE  Alarm, Appliance; Alarm, Power Failure; Frantz Feb99 Commercial Killer; Commercial Killer; Counter, General Purpose; Crystal Receiver, Souped Up; Crystal Receiver, Souped Up; Chapel May64 Transistorized; Fishure; Fishure; Fishure; Fishure; Fishure; Fishing Taillight (Bicycle): Insect Killer; Metal Locator (Radiogizmo): Negative Ion Generator, Build a; Electro-Magic; Electro-Magic; Pollack Mar85 Electro-Magic; Pollack Mar85 Electro-Magic; Pugh Mar40 Geommets, New Jobs For; Rocke May54  Frequency Spotter, Crystal Receiver, Souped Up; Crystal Receiver, Souped Up; Feb80  Chapel May60 Feb80 Negative Ion Generator, Build a; Generator, Build a; Generator, Build a; Constitution, Power Pack, Camper (12v. P	TECT FOIL	IPMENT (C)	district.	MISC. CONSTR	UCTION PROJEC	C12
Frequency Spotter, Crystal Controlled; Stoner Mar65  RF Signal Generator (Transistorized); Stereo Omnimeter; Kolbe Jan34 TV Patterner; Shields July68 THEORY AND PRACTICE  Diode Polarities; Pollack Mar65  Diode Polarities; Pollack Mar65 Electro-Magic; Electroplating, I and II; Pugh Mar66  Grommets, New Your Sepair.  Alarm, Power Failure; Patrick Frantz Frantz July68 Blinker, Electronic; General Purpose; Counter, General Purp	IESI EQU	II MEITI (O)		Alarm, Appliance;		July5
Controlled; Stoner Mar65  RF Signal Generator (Transistorized); Benrey Apr45 Stereo Omnimeter; Kolbe Jan34 TV Patterner; Shields July68 TV Patterner; D. Gordon Feb80  THEORY AND PRACTICE  Diode Polarities; Pollack Mar85 Electro-Magic; Electroplating, I and II; Pugh Mar60 Grommet, New to Repair  Apr65 Commercial Killer; Parker Sept88 Counter, General Purpose; Benrey Counter, General Purpose; Counter, General Purpose; Counter, General Purpose; Benrey Counter, General Purpose; Counter, Genera	Frequency Spotter, Crystal			Alarm, Power Failure;		Feb9
TV Patterner; Shields July68 Feb80 Fence Charger, Transistorized; Fish Lure; Fishing Taillight (Bicycle); Allison Pollack Insect Killer; Metal Locator (Rodiogizmo); Maynard Maynard Mar85 Peb80 Negative Ion Generator; Electro-Magic; Pollack Mar85 Negative Ion Generator; Build at Electroplating, I and II; Pugh Mar60 Panic Button; Power Pack, Camper (12v. DC to 117v. AC); Stoner July5	Controlled;	Stoner	Mar6	C Villant	Parker	July8
TV Patterner; Shields July68 Feb80 Fence Charger, Transistorized; Fish Lure; Fishing Taillight (Bicycle); Allison Pollack Insect Killer; Metal Locator (Rodiogizmo); Maynard Maynard Mar85 Peb80 Negative Ion Generator; Electro-Magic; Pollack Mar85 Negative Ion Generator; Build at Electroplating, I and II; Pugh Mar60 Panic Button; Power Pack, Camper (12v. DC to 117v. AC); Stoner July5	(Transistorized);		Apr4	Counter, General Purpose Crystal Receiver, Souped	benrey	
Transistorized; Fish Lure; Flashing Taillight (Bicycle); Allison Pollack Mar85 Electro-Magic; Electroplating, I and II; Pugh Mar85 Apr60 Ap			July6	8 Up;	Chapel	
THEORY AND PRACTICE  This hing Taillight (Bicycle); Flashing Taillight (	VOM Battery Conversion;		Feb8	Transistorized;		July5
THEORY AND PRACTICE  Insect Killer; Metal Locator (Radiogizmo); Maynard Maynar				Fish Lure; Flashing Taillight (Bicycle)	; Allison	July4
Comparison   Com	THEORY A	ND PRACTICI		Insect Killer;	Pollack	July5
Electro-Magic; Pollack Mar85 Build a; G. Grand Apr60 February May and How Power; Patrick Apr60 Panic Button; Maynard Nov	Ball Call Partie Vol.			(Radiogizmo):	Maynard	Apr7
Electro-Magic; Formack Mar46 Oscillator, Low Power; Patrick Maynard Nov  Grommets, New Jobs For; Rocke May54 Power Pack, Camper (12v. Bedier How to Repair  DC to 117v. AC); Stoner Septiments		Pollack		K Ruild a:	G. Gordon	Sept
Grommets, New Jobs For; Rocke May54 Power Pack, Camper (12v. July  DC to 117v. AC); Stoner Sont	Electro-Magic; Electroplating, I and II;		Mar4	6 Oscillator, Low Power;	Patrick	Nov
Padiar How to Repair			Apr6 May5	Power Pack, Camper (12)		
	Radios, How to Repair,			DC to 117v. AC);	Stoner Maynard	Sept4
I-Y: G. Gordon February Schwartz Jan	Rectifiers, Semiconductor;	Schwartz	Jan6	60		-8
Troubleshoot Your Projects; Garner Mar82	Troubleshoot Your Projects	Garner	Mar8	32		

# El's 1962 Index El's 1962 Index

C—Construction Project Dr.—Hi-Fi Doctor F—Feature Article TP—Theory & Practice

Name following title is author. Page number follows the date.

#### AMATEUR RADIO

Antenna, Hidden Arboreal Golden Anniversary of	Pyle	(C)	Mar.	41
Amateur Radio	R. Hertzberg:	(F)	Mar.	85
License, Upgrading Your Mobile Mike, A Safe	R. Hertzberg Herman	(F)		
Monitor Meter Novices, Oldtimer Gives	Diers	(C)	Nov.	79
Advice to Orbit for Oscar, The	Pyle		Sept.	
Hitchhiking Ham SSB, Tuning with BFO Tape Recorder in Your Ham	Jacobs Rosa		Mar. Sept.	
Shack Voice-Controlled Relay	Blechman	(C)	July	59
(VOX) Winter, Get Ready for	Friedman Hoover	(C) (F)	Sept. Nov.	56

#### AUDIO & HI-FI

L. C. L. C.				
Amplification Principle,				
New		(F)	Jan.	117
FM Antennas: Which One				
for You?	Friedman	(F)	Nov.	38
FM Multiplex, Questions & Answers		/==:		
FM Signal Booster,		(TP)	July	87
Transistorized	Lininger	101		~~
FM Tuner Reports, A	Lininger	(C)	Sept.	12
Postscript to El's			Mar.	50
FM Tuners: Testing, Testing		(TP)	Jan.	92
MI-FI Sound From Your TV	Buckwalter	(c)	July	70
Infinitely Baffling	Sinclair	(F)	July	80
Multiple Speaker Systems	Klein	(TP)	Mar.	65
Printed Circuit Boards in				
in Hi-Fi Kits		(TP)	Nov.	102
Speaker System Design:				
The Duoflex Speaker System:	Klein	(TP)	July	82
The Duoflex				
Speakers, Electrostatic	Klein	(C)	July	29
(and Old Amplifiers)		(***)		
Stereo Boom for FM		(TP)	Mar.	
Stereo FM Adaptor, Build		(F)	May	89
your Own	Kolbe	(C)	Jan.	02
Stereo FM Beacon	Kolbe	(2)	Mar.	
Stereo FM Theory		(TP)	Mar.	
Stereo Mike Mixer	Kolbe	(C)	Sept.	
Stereo Samplers: Records	Eisenberg	(F)	July	
Tape Club Story, The	Broder	(F)	Sept.	
Tape Recorder Distortion		(TP)	Mar.	84
Turntables, How They Make				
Ultra-Linearity		(F)	Jan.	
Olli a-Fille attity		(TP)	Sept.	104

#### CITIZENS BAND

Antenna, Choose the Right Antenna Duplexer Antennas, How to Build 4	Friedman Friedman	(TP) (C)	May Mar.	66
CB Car Speaker, CB Thru Your CB Club, How to Form a	Tepfer Moses Morris	(C)	May May May	61

CB Club: Making Yours			
Worthwhile	Frederick		
CB Club Paper, How to	Frederick	(F)	May43
Publish a Good			
	Kneitel	(F)	Nov87
CB Club Papers: Want to			
Exchange?		(F)	Nov
CB for Shut-ins		(F)	Nov98
CB Radio, How to Get the			
Most Out of		(F)	May29
Double-Conversion			
Adaptor	Friedman	(C)	Nov 62
Earphone for Your		,	
Transceiver, An	Moses	(C)	May61
FCC Monitor, Can You		(0)	01
Spot an?	Buckwalter	(F)	July76
Field Strength Meter,		117	July/6
Super-Sensitive	Friedman	(C)	Sept89
First Station, Your	Kneitel	(F)	
License-Free Band, The	Walker	(F)	May38
Marine Lightning Arrester	Robberson		May57
Mobile Mike, A Safe	Herman	(C)	July38
Monitor Meter	Diers	(C)	May68
National Convention, El	Diera	(C)	Nov79
Attends a	Buckwalter	450	
New in CB: Equipment	Buckwaiter	(F)	Sept43
Push-To-Talk Switching		(F)	Sept114
Servicing Made Easy, Parts	Friedman	(C)	Jan64
I, II, III			
		(TP)	May70
			July66
Signal Generator	_		Sept99
S-Meter, Add an	Cenan	(C)	May62
30-Watt CB	Mann	(C)	May74
Tiny-Talkie	Buckwalter	(F)	Nov67
	Maynard	(C)	May46
Transceiver, How to Buy a	Buckwalter	(F)	May30
Transmitter For Model Rockets, Flyweight			
Transmitter Outer 7	Stine	(C)	May76
Transmitter Output, Tune			
	Buckwalter \	(TP)	May81
Tune-Up Meter, Add a	Stephens	(C)	May80
Voice-Controlled Relay (VOX)		,	
Voice Power 1 7	Friedman	(C)	Sept 56
Voice-Powered Transmitter		(F)	Mar47
		. ,	

#### KIT REPORTS

CB Transceiver (Heathkit GW-10) Electronic Thermometer: Realistic Novatherm Ham Station, Complete (Hallicrafters HT-40	May65 July83
Stereo FM Tuner (Scott LT-110) Stereo Power Amplifier (Lafayette KT-550) SW Receiver (Heathkit GR-91) SW Receiver (Knightkit R-100) SW Receiver (Philmore CR-5AC) TV Set, 23-inch (Transvision Professional)	Mar96 July56 Sept81 Jan76 Jan80 Jan78 Nov93
Two Power Supplies (EICO 1073 & 1064) Two-Speed Turntable (Fairchild 440)	Sept110 Nov82

#### MEDICAL ELECTRONICS (F)

Dentistry: Light That Bends Electro Shock, The Truth		Jan105
About Heart Pacers: How They	Markoff	Nov32
Work Medical Electronics, What's	Pursglove	July36
New in	Markoff	Mar78

#### ROCKETRY AND SPACE

Astronauts, How We Talk to the Gamma Eye on High Orbit for Oscar, The	Zuckerman	(F)	Mar52 Jan119
Hitchhiking Ham Satellite, America's		(F)	Mar63
Super-Secret	Moran	(F)	May86

# El's 1962 Index El's 1962 Index

Transmitter for Model Rockets, Flyweight	Stine	(C)	Мау	76
SHORT-W	AVE LISTE	NING		

Amateur Radio Monitor: Next Best Thing to Being		450	New	
a Ham	Stanbury	(F)	Nov	68
Antennas, Three Simple SWL	Stanbury	(TP)		46
DX Awards, El's New		(F)		38
DX Awards, 2 New		(F)		90
DX Award Winners		(F)		.110
DX. Scrambled-Call	Stanbury	(F)	May .	90
DXing the Russian				
Spaceships	Stanbury	(F)	July .	.100
DXing Up Top	Greenberg	(F)	Nov	.100
First 100 Countries, Your		(F)	Jan	41
Foreign News Outlets, 50				
Rest	Sabine	(F)	July .	74
Latin America: Red Hot	Japine			
DX	Stanbury	(F)	Sept	63
	Stanbury	(F)		33
Radio Clubs, All About	Stallouty	(1)		
Radio Propagation Reports,	Daniels	(F)	Jan	49
How to Use	Friedman	(C)		66
Receiver: 30-50 Special	rriedman	(0)	Jan	
Reception Reports: How to	C	/E\	Jan	45
Report	Stanbury	(F)		
Soup Up Your SWL Rig	Buckwalter	(C)		71
SWL Equipment Roundup	Buckwalter	(F)		52
Time Conversion, Easy	Boord	(F)	May .	. 106
24-Hour Short-Wave			11	
Schedule		(F)		29
UN's Radio Enemies	Stanbury	(F)	Mar.	80

#### TEST EQUIPMENT

CB Signal Generator	Cenan	(C)	May	62
Continuity Checker, Shock-Free	D. Gordon	(TP)	Sept.	74
Square-Wave Adaptor, Transistorized	Horowitz	(0)	Sept.	84

#### THEORY AND PRACTICE

Antennas, The New TV	Daniels	Mar29
AC Electromagnetism Basic Batteries	Morris	Nov42 July41
Electromagnetism Made Easy	Buckwalter	Sept51
Electricity, An Expert's Definition	Millman	Sept40
Impedance, What Is?	Shields	Mar74
Perforated Chassis Boards, Getting the Most Out of	Benrey	Mar35
Power Transformer, Meet the	Stoner	Nov59
Printed Circuit, Make Your	Kolbe	July47
Soldering Gun, Fix That	Comstock	Mar88
Spring Cleaning for Your Electronic Gear	Harris	July94
Square Wave, The Useful	Klein	Sept86
Tools	Klein	May85
Transistor Circuits, Basic	Kiver	Sept29
TV, Vertical Problems in Your	Margolis	Nov 105

#### FEATURE ARTICLES

Beware: EHV		Mar58
Careers: Computers, A Job in	Gilmore	July42
Rentals, A Ransom From	Joseph	Sept70

Computer on the Phone,	Arthur	Mar,38
There is a		July53
Electronic Banker, The	Jackson	July22
Electronic Music: Dig That		11
Crazy Music!	Gilmore	Nov84
Electronic Spying: Shhhh!	Lenk	Nov43
Engine With the Ion Push		Sept55
Engine With Magnetic		
Squeeze		Sept54
Fallout Checker, New		May115
		,
Fuel Cell in Your Future,	Harris	Sept 106
There's a	riarris	3ep1100
Generators Have NMP,		50 71
These	Hoefler	Mar71
Machines That Read	Gilmore	Sept46
Marine Radio: Talking		
Beacon, The		July40
Radioman, First Flying		Sept50
Russian Spy Radios: How		
They Work	Pursglove	Jan89
	Gregory	July96
Wireless, Cradle of U.S.	Cladol	
Wireless Weathermen		Mar90
Without Men		May7
Youth Wants to Do		may

#### MISC. CONSTRUCTION PROJECTS

Decision-Maker, Electronic	Sherwood	July78
Oscillator,		16
Light-Controlled	Patrick	Mar68
Printed-Circuit Pocket		1.1. 70
Radio	Kolbe	July50
Proximity Detector, A New-	414 17	
Design	Shields	Nov56
Radio Direction-Finder	Buckwalter	Sept92
Signal Booster for Your		
Portable Radio	Shop	Nov66
Slave Flash, Miniature	Winklepleck	Nov74
Ultrasonic Cleaner	Mann	Nov46
Weather-Wave Converter	Chapel	Nov108
Wireless Telephone		
Extension	Buckwalter	Nov76



"Yep, it is a little heavier than some factorybuilt amplifiers. But how many of them give you a full six pounds of solder?"

# El's 1963 Index El's 1963 Index

C—Construction Project
F—Feature Article
TP—Theory & Practice Article
Name following title is author.
Page number follows the date.

#### AMATEUR RADIO

Accessories, Ten Most Use-				
ful Ham		(F)	Sept.	41
Antenna Facts, Ham	Friedman	(TP)	Sept.	
Antenna, 3-Band Mainmast	Noll		Sept.	
Antenna Tuner, 250-Watt	Mann	(C)	Sept.	
Antenna Tuner, 250-Watt	Bacon	(TP)	Jan.	
Antennas, Invisible	bacon	(IF)	Jan.	73
ARRL: The League that	- 11 - 1	(5)		
Maxim Built	R. Hertzberg	(1)	Sept.	
Code, The		(TP)	Sept.	32
Command Control Center				
(for Surplus Receivers)	Stephens	(C)	Sept.	100
Com-Vox. The (Voice-Op-				
erated Relay)	Friedman	(C)	Nov.	33
Crystal Calibrator, A Mod-				
ulated	Cenan	(C)	Sept.	75
Filter, Key-Click	Rosa	(C)	July	
GDO, Using a (Grid-Dip				
Oscillator)	Cenan	(TP)	Sept.	38
Ham at 10 Fathoms	R. Hertzberg		Jan.	39
Ham Station, Build a 2-	K. Hellisberg	.,,	von.	
	Kolbe	(C)	Sept.	67
Band	KOIDe	(0)	Jepi.	
Headphones, Peaking for	R. Turner	(C)	May	45
CW	K. Turner	(0)	may	
Historical: When Paw Was		(F)	Nov.	94
a Boy		(-)	1404.	74
Keyer, Build Your Own		(0)	c _ ı	00
Electronic	Friedman	(C)	Sept.	
Keying Monitor, CW	Friedman	(C)	Jan.	
Library, A Ham's	Buckwalter	(F)	Sept.	80
Radio Teletype Hams, The				
(RTTY)	Kretzman	(F)	Sept.	
RF Leak, Stop That	Rosa	(c)	Sept.	
RF Output Meter, Add-On	Cogan	(C)	Sept.	78
Sideswiper for El's Elec-				
tronic Keyer	Wainwright	(C)	Sept.	85
Single Sideband: What You	.,	,		
Should Know About SSB	Smith	(TP)	Sept.	53
TV, Hams on	Buckwalter	(F)	Nov.	
	DOCK HOITE!	(TP)	Sept.	
Test, The		(TP)	Sept.	
Theory, The	Huntoon	(F)	Sept.	
Why Be a Ham?	HUNTOON	(1)	Jept.	30
Wonderful World of Ama-		15	c	20
teur Radio		(+)	Sept.	29

#### AUDIO & HI-FI

Antenna System, Master			
TY/FM	Cantor	(F)	Nov54
Cartridges, Let's Look at	Fantel	(TP)	Sept 106
Filter, FM Interference	Herman	(C)	Jan60
FM Stereo Finder	Blechman	(C)	May36
45 LPs, Those	Milder	(F)	May66
Hi-Fi Set, Ed Blount's \$200,-			
000			July20
Mini-Amp	Sheldon	(C)	July86
Mini-Fi, The	D. Gordon	(C)	Jan82
Portable, Super (Broadcast			
Band)	Kolbe		July58
Stereo Balancer	Glenn	(C)	Nov108
Strobe Bars For Your Turn-			
table	Hern	(C)	July89
Transistor Amplifiers,			
What's Wrong With	Kolbe	(TP)	Nov29
Transistor Portables, Acous-			
tic Cabinet for	Stella	(C)	Jan76

#### CITIZENS BAND

Amplifier, Voice-Power	Cogan	(C)	Mar.	101
Ampli-Mike, The	Friedman	(C)	Nov.	
Antennas: Little Things		, -,		
Mean a Lot	Tepfer	(TP)	Mar.	78
	Gibson	(F)	Mar.	
	Buckwalter	(F)	mai.	, 3
CB Corner:	DUCKWATTEL	tia	ful.	94
The Big Bang			July	
Canadian CB			Jan.	
The FCC's Bombshell			May	
Footing the Bill			Nov.	
More Part 19 Revisions			Mar.	
Putting the Bite On				44
CB To the Rescue	Gray	(F)	Nov.	115
Circuit Theory, Basic CB	Buckwalter	(TP)		
Part 1			Mar.	
Part II			May	54
CitizenScope	Friedman	(C)	Mar.	58
Clubs, Directory of CB		(F)	July	52
Clubs, Top 10 CB		(F)	Mar.	
Extension, Multi-Function				
for CB	Buckwalter	(C)	Nov.	64
FCC Thinks of CB, What the	ouekwa, i ci	(F)	Mar.	
FCC Thoughts on CB, Some	Buckwalter	(F)	Jan.	
	packwaller	(, )	<b>J G</b> II.	
Handi-Talkie, 79¢ Soup-Up	Schecter	(C)	Jan.	42
for Your	Schecter	(0)	Jan.	72
Handset to Your Trans-	14/.: .!-ba	(0)	14	74
ceiver, Add a	Wainwright	(C)	Mar.	/4
History of CB, A Confiden-		151		
tial	Stephens	(F)	Mar.	
Kits, Survey of CB	Buckwalter	(F)	Mar.	92
Meter, Direct Reading				
Power Output	Cenan	(C)		80
Meter, Modulation	Cenan	(C)	Mar.	66
Meter, Tune-Up Transmis-				
sion Line	Toler	(C)	Mar.	
Mike, Switch to a Better	Stephens	(C)	Mar.	
Mobile, Perk Up Your	. Mann	· (F)	Mar.	89
Modular CB Rigs, How				
They Make	O'Neil	(F)	Mar.	104
Movies, Free for Club		-		
Meetings	Simms	(F)	Mar.	64
Papers, Prize-Winning				
CB Club		(F)	July	62
Papers, What's Wrong		. ,	,	
With CB Club?		(F)	July	62
		(,)	• • • • •	
Remote Control: Break-in/	Jaski	(C)	Jan.	104
Signaler for CB			Mar	
Signal Booster, CB	Redmond	(C)	MI di	32
Signal Pattern, How to Map	0111.71	150		10
Your	O'Neil	(F)	Mar	68
Single Sideband:				
First SSB CB Rig on the		4=1		
Air	Buckwalter	(F)	May	
Sideband CB Notes		(F)	May	
Skip, Truth About GB	Walker	(F)	Mar.	
Speech Compressor, 16 db	Friedman	(C)	Mar.	
Sure-Light, CB	Friedman	(C)	July	
TVI, How to Get Rid of CB	Mann	(TP)	Mar.	37

#### KIT REPORTS

Amplifier, Stereo, Master Control	
(Fisher KX-200)	Jan92
Amplifiers, Stereo Transistor	Nov.
Heathkit AA-21	72
Lafayette KT900	74
Realistic 208	76
Knight-Kit KG-870 (Preview)	78
Capacitor Checker, In-Circuit (Paco C-25)	Jan64
Phone Patch, Hybrid (Heathkit HD-19)	Sept50
Portable Radio, FM (Heath GR-61)	July98

# El's 1963 Index El's 1963 Index

Tachometer, Electronic (Knight-Kit)	July70
Transmitter, 150-Watt AM/CW	
(Knight-Kit T-150)	Sept104
Walkie-Talkies, License-Free	May96
EICO 740	
Spacephone \$2100	

#### SHORT-WAVE LISTENING

Alaska, Operation	Stanbury	YFY	Jan.	58
Antenna Tuner, SWL	Cogan	(C)	Nov.	96
Award Hunters' Bonanza	Stanbury	(F)	Nov.	38
CW DX, Why Don't You	Stanbury	(F)	July	84
Try?				
DX Award, How to Win an				
EI		(F)	Jan.	66
DX Club, Notes From El's		(F)	Nov.	111
DXing CB in Sweden	Elfving	(F)	July	109
Fraud-Finder, Short-Wave	Stanbury	(F)	May	70
Radio Propaganda Hand-				
book	Milder	(F)	May	82
WUMS, Strange Case of				
Radio	Stanbury	(F)	May	94

#### THEORY AND PRACTICE

Battery, How to Choose the			
Right	Stephens	Nov.	103
Beginner's Page:	Morris		
Generator, Build Your			
Own AC		Nov.	71
Key, Telegraph		July	50
Mike, How To Make a		Sept.	89
Radio Waves		May	35
Resistors, Instant		Jan.	68
Voltage, How to Drop a		Mar.	110
Decibel, The	Friedman	July	55
Home-brews, Give Them			
That Professional Look	Cogan	July	75
Ionosphere: Radio's Mirror			
in the Sky	Harris	July	33
Microphones	Friedman, Milder	Jan.	48
Modulation, All About	Friedman	Mar.	84
Ohm's Law: I=E/R	Deutsch	May	32
Oscilloscope: CRT Shield			
for Your Scope	D. Gordon	Jan.	81
Rectifiers, How to Use			
Silicon	Mann	Jan.	100
Scatter	Marraffino	Nov.	43
SWR Means to You, What	Mann	July	61
Tips, Testbench		July	51
Transformer, Meet the			
Audio	Stoner	May	78
Transmission Line, How to			
Choose the Right	Toler	Sept.	45

#### SPECIAL FEATURE ARTICLES

Careers:		
Closed Circuit Television:		
Fun and Profit in CCTV	Joseph	Nov57
Counterspy, Want to be		
a?	Pursglove	July67

Cinema Sound	Madison	July45
Counter, Heart-Powered	Dorozynski	Nov 98
Crystal Clear		July77
Electron Beam: Beam That		
Does Almost Anything	Gilmore	Nov 59
Electronic People-Watcher		July110
Electronics in Guerilla War-		
fare: Our Silent Ally	Pursglove	May29
Fiber Optics, Fascinating	Gilmore	July29
Furnace, All-Electric		May50
Health, Are Radio Waves		
a Threat to	Jaski	July78
Medical Electronics:		
Russia's Amazing Elec-		
tronic Hand	Kobrinsky	Jan62
Tumniks for the Tummy	Dorozynski	May77
Microwaves, Way-Out	Gilmore	May73
Plant Sleuth, Electronic	Unger	May48
Prefixes: Mega, Giga and		
All That Jazz	Graf	Nov53
Printing, True Electronic		Jan78
Radio, Look What's Hap-		
pened to	Stanbury	Jan:31
Radio, Pigeon-Powered		July65
Radio Telescope: Telescope		
Without a Lens		July92
SAC Command Post: Hot-		
test Hole This. Side of		
Hell	R. Hertzberg	May90
Sea, Electronics Under the	Kai-Nung	May87
Space, Solar Communica-		
tions for		Jan56
Sweden's All Atomic Town		Nov63
Thinking Machines, Second		
Thoughts on -	Maizel	Jan69
TV, Transatlantic: 1930	Duignan	July113
X Rays, A New Look in	Rosa	Jan40

#### SPECIAL CONSTRUCTION PROJECTS

Cable & Pipe Finder,		
Handyman's	Mann	Nov79
Controller, All-Purpose		
Wireless	Shields	Nov99
Eavesdropper: The Big Ear	Shields	May62
Generator, TV Pattern	Shields	July80
Photography:		
El Super Strobe	Friedman	May58
Ultra-Sensitive Exposure		
Mater	Pollack	Nov46
Public Address: Personal		
PA	Moran	May45
RF Blocking Probe for Your		
VOM	Friedman	May 72
Robot Gun-Slinger	Pollack	July35
Slide Programmer, Auto-		
matic	Mann	July72
Speed Control, Semicon-		
ductor	Jacques	Jan34
Surge-Stopper, The	Gaulin	Jan108
Telephone Bell Extension	Toler	Nov84
Test Instruments, Pocket		
Size:	Frantz	Jan86
Audio Signal Generator		
RF Signal Generator		
		-

January, 1964

# El's 1964 Index El's 1964 Index

C—Construction Project
F—Feature Article
TP—Theory & Practice Article
Name following title is author.
Page number follows the date.

#### AMATEUR RADIO

		_	_	_
Antenna Analyzer	Friedman	(C)	Jan.	47
Arrester, Lightning	Pyle	(C)	May	34
Awards for Hams and				
SWL's, EI DX		(F)	Jan.	79
Awards for the Ham Shack	Anzalone	(F)	July	68
BFO, Universal	Blechman	(C)	Nov.	96
Clock Control for Ham and	DII	- (C)	C	.50
CB Stations Code Sender, Automatic	Black Grossman	(C)	Sept. Mar.	
Compressor Limiter, Ham-	Grossman	(0)	Mai.	7
CB	Friedman	(C)	May	47
CPO. Wireless	Maynard	(C)	Sept.	
CQ Sender, Automatic	Buckwalter	(C)	Jan.	
Dipper, All-Transistor		- '-'		
Modulated	Friedman	(C)	Nov.	101
Field Strength Meter				
for 6 and 2, Amplified	Friedman	(C)	July	
Ham's Greatest Thrill, A		(F)	July	100
Headphones, How to Hook		(70)		
up Crystal	Coccozza	(TP)	July	84
Heath Sixer, Deluxe Your	Blechman Cogan	(C)	Jan. Mar.	55
Junior Ham, Want to be a? Memory Box for Hams	Blechman	(C) (F)	Mar.	.102
Modulation Monitor, In-	bieciman	(1)	Widi.	
Line	Friedman	(C)	Nov.	81
Phone Patch, Ten-Buck	Friedman	(Č)	Mar.	91
Reception, Diversity	Rosa	(F)	July	96
Slanguage, Ham	Walker	(F)	May	68
Sunspots Are Coming!	Leinwoll	(F)	Sept.	23
Transmitter: The Scrounger	Friedman	(C)	Sept.	
WWV Story, The	Lincoln	(F)	July	53

#### AUDIO, STEREO & HI-FI

Amplifier, Build an				
Integrated Stereo	Morrow	(C)	July	42
Amplifier Curves, Those		(-/		
Transistor		(F)	Jan.	103
Amplifier: The Stereo 120	Kolbe	(C)	Jan.	
Booster, QI for FM	Costa	(C)	Nov.	25
Design for Living	003.10	(F)	July	74
FM, Can Networks Save?	Angus	(F)	July	86
FM, Q1 Booster for	Costa	(C)	Nov.	25
Generator, 6X Audio	Friedman	(c)	May	90
Headphone Hi-Fi	Berger	(F)	May	74
Headphones, How to Hook	berger	(1)	May	7
Up Crystal	Coccozza	(TP)	July	84
Hi-Fi Hanky-Panky	Milder	(F)	Sept.	
Load Box, Tape Fan's	Glenn	(C)	May.	
Mixer, All-Purpose Stereo	Glenn	(C)	Sept.	
Preamp, Build a Tape	Flanagan &	(0)	Jepi.	70
Record Record	Friedman	(C)	Jan.	90
Record Live, How to	Milder	(E)	July	
Sheet Recorder, Ever Hear	Milder	(-)	July	75
of a?		/E1	Jan.	EO
Stereo on Wheels	Lynn	(F)	Sept.	
Stereo the Easy Way,	Lynn	(,,	Jepi.	
Going Casy Way,	Cohen	(C)	Mar.	49
Tape Recorder, So You're	Collen	(0)	Mai.	70
Going to Buy a	Milder	(F)	Jan.	29
Tapes You Never Touch	Mildel	(F)	Jan.	
Volume Limiter, Photoelec-		( ' '	Juli.	70
tric Automatic	Hahn	ICI	Jan.	100
Wattmeter, World's	1101111	(0)	Jan.	00
Simplest Audio	Gaulin	(C)	Sept.	108
Simplest Addio	Oddilli	(0)	JUP II.	

#### CITIZENS BAND

	и			
Antenna Analyzer	Friedman	101	1	47
		(C)	Jan.	47
Antenna, Car-Top CB	Buckwalter	(C)	Jan.	68
Antennas, Oddball	Tepfer	(F)	Mar.	71
Arrester, Lightning	Pyle	(C)	May	34
Bandspread for CB,				
Calibrated	Buckwalter	(C)	Sept.	27
CB Converter: One-Way CB	Redmond	(C)	Nov.	104
CB Corner:	Buckwalter	(F)		
Accident, What to do at	DOCK GITCI	,		
an			May	44
			IVIGY	
Citizens Band?, What's				
Ahead for the			Mar.	73
Dutch Uncle			Nov.	89
Licensing, Birdbrain			Sept.	
Phantom Strikes, A			July	51
Unopened Door, The Case				
of the			Jan.	63,
CB Equipment: Yesterday,				
Today, Tomorrow	Walker	(F)	Mar.	76
CB Papers: CB's Flood of	******	٠.,		
Ink	Cartwright	(F)	Nov.	55
Citizens Band, The Other	Frederick	(F)	Mar.	46
Clock Control for Ham &	FIEGETICK	(1)	Mar.	40
	01 -1	101		-
CB Stations	Black	(C)	Sept.	
Club Directory (Cont'd)		(F)	July	112
Compressor Limiter, Ham-				
CB	Friedman	(C)	May	47
Crimebusting with CB		(F)	Mar.	74
Crystal Checker, CB	Cenan	(C)	Mar.	66
Dipper, All-Transistor				
Modulated	Friedman	(C)	Nov.	101
Dipper, CB	Buckwalter	(C)	May	82
Direction Finder, Low-Cost	Buckwalter	(č)	Mar.	43
		(6)		
Junior Ham, Want to be a?	Cogan	(0)	Mar.	55
Microphones: PTT, How to				
Switch to	Walker	(C)	May	70
Modulation Monitor, Big-i				
CB	Mann	(C)	July	56
Modulation Monitor, In-				
Line	Friedman	(C)	Nov.	81
Myths, CB's Mammoth	Friedman	(F)	July	98
Q. Hike That	Friedman	(C)	Mar.	63
Receiver: Pocket Superhet	Simms	(č)	Mar.	39
Rescue, Ready for		(F)	Mar.	
	Stewart			
Service Instruments, CB	Mann	(F)	Mar.	
Service Set, 6-in-I	Cogan	(C)	Mar.	
Sunspots Are Coming!	Leinwoll	(F)	Sept.	
SWR Meter for CB	Walker	(C)	Jan.	33
SWR Reducer	Sands	(F)	July	
The state of	- Cilia	(. /	/	

#### KIT REPORTS

Converter, 6-Meter (Ameco CB-6K)	Nov.	100
Oscilloscope, 3-inch (Eico 430)	Jan.	96
Preamp, Stereo (Dynakit PAS-3)	May	42
Receiver, Color-TV (Heathkit GR-53)	July	63
Receiver, Short-Wave (Knight-Kit Star Roamer)	Nov.	32
Receiver, Stereo FM (Eico 2536)	Sept.	70
Signal Tracer, Tuned (Conar 230)	Jan.	83
Television Receiver, Color (Heathkit GR-53)	July	63
Transceiver, SSB (Heathkit HW-12)	July	66
Tube Tester, Low-Cost (EMC 213)	Sept.	73
Vacuum-Tube Volt-Milliammeter (Hallicrafters		
HM-I)	May	50
Walkie-Talkies, CB, I-watt (Heath GW-52 &		
Knight-Kit KG-4000A)	Mar.	68

#### SHORT-WAVE LISTENING

	All-Band SV	WL Walker Pyle		Sept. May	
Arrester.	Lightning	LAIG	(0)	171047	

Electronics Illustrated

# El's 1964 Index El's 1964 Index

Awards For Hams and			
SWL's, EI DX		(F)	Jan79
Broadcast Band, DX Boon			
For the	Bower		Nov93
Castro Speaks To Us	Stanbury II	(F)	Mar108
Freebooter, Britain's			
Floating	Carter		Nov74
Germanys, DXing the	Carter	(F)	Sept56
Headphones, How to Hook			
Up Crystal	Coccozza	(TP)	July84
Radio Moscow:			
Inside Radio Moscow	Bower	(F)	May 29
Outside Radio Moscow			
Way Out!	Carter		May32
Reception, Diversity	Rosa	(F)	July96
Short Waves, DXing the			
Slightly	Stanbury 11	(F)	Mar98
Short-Wave Broadcasting:			
2 Faces of SWBC	Stanbury II	(F)	Jan84
Short-Wave Schedule, 24-			
Hour		(F)	
Sunspots Are Coming!	Leinwoll		Sept23
WWV Story, The	Lincoln	(F)	July53

#### THEORY AND PRACTICE

Beginner's Page:	Morris	
Diode, The		May 100
Meter, Multiplying a		Mar89
Solar Cells		Jan51
Timer, R-C		Nov114
Transistor, The		July62
Wave Trap, The		
Wonderful		Sept69
Circuit Breakers: Give Your		
Circuit a Break	Blechman	July78
Color TV, The ABC's of	Buckwalter	Nov70
Construction Hints: Try		
These		Sept68
Dr. Doppler's Strange Effect	Robberson	Nov28
Headphones, How to Hook	•	
Up Crystal	Coccozza	July84
Magnets, Super-Cold		14 104
Super-	Bush	May 106
Parts, How to Pinch Pennies	Mann	Nov52
On Q-Multiplier:	Mann	NOV. ,52
What's a Q-Multiplier,		
Anyway?		May78
Radio at 100 Billion Cycles	Harris	May45
Schematics, Super-Size	1101113	Nov120
Semiconductors, What's		1404120
New in	Collins	Jan38
Tools For the Electronic	Commis	Jan50
Hobbyist	Mann	Sept44
Vacuum Tubes, Basic	Widilli	Jept
Course in	Frye	July25
Vacuum Tubes, 3 Experi-	11,70	54.y£5
ments With		July37
VOM, The Dangerous	Whiteman	Sept74
Wire Gauging Made Easy	Solomon	Mar10
, made casy		17101.

#### SPECIAL FEATURE ARTICLES

Antenna Lab, Half-Pint Armstrong, The Agonies of		May80
Major Design For Living	Harper	Nov84 July74
FCC: Those Kilocycle Kops FM, Can Networks Save?	Kneitel Angus	Sept49 July86

Freebooter, Britain's		
Floating	Carter	Nov74
Induction, Instruction by		Sept86
Istors, Meet the	Re	May38
Lingos, Instant	Hansen	Nov98
Machines That Listen	Locke	Mar33
Magnets, Super-Cold		
Super-	Bush	May . 106
Medical Electronics:		
Pinhead Patients		Sept94
Shocking Facts on		
Electric Shock, The	Cummings	Sept78
Picturephone: "Mr.		
Watson, 1 See You."		Nov90
Radio at 100 Billion Cycles	Harris	May45
Radio + Radar = Rescue	Haas	May94
Radio, Who Really		
Invented?	Hays	Sept83
Semiconductors, What's		
New in	Collins	Jan38
Sunspots Are Coming!	Leinwoll	Sept 23
Syncom: Getting the		
Message Across	Mitchell	Jans70
Telephone Device:		
Talk Now Listen		
Later!		Sept81
TV Antennas, How Good		
Are the New Indoor?	Friedman	Sept76
TV, The ABC's of Color	Buckwalter	Nov70
TV Recorders, The Truth		
About Those Home	Gilmore	Sept91
Television, Tunnel	Haas	Sept40
Tickers, New Ways to Keep		
Tabs on	Maizel	Nov67
Tube Numbers, Those		
European	Tromanhauser	July89
World's Fair, Electronic		
Wonders at the	Gilmore	Mar29
WWV Story, The	Lincoln	July53
		,

#### SPECIAL CONSTRUCTION PROJECTS

Battery Analyst, The Battery Chargers: Budget Charger Nickel-Cad Charger Mann Bechman Beckwalter Beckwalter Bechman Beckwalter Bechman Beckwalter Bechman Beckwalter Bergida May 110 Beckwalter Bergida May 110 Beckwalter B			
Budget Charger Budget Charger Budget Charger Nickel-Cad Charger BFO, Universal Capacitor Checker: Mickey-Mike, The Electronic Games: Old Riddle—New Game Quix Game Umpire Intercom, A Power Pack for Your Telephone Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Seope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Voil water Switch, Electronic Wattmeter, Waldics Wattmeter, Waldics Wattmeter, Waldics Bleckman Mann Mann May —72 Mannard Buckwalter  Buckwalter  Nov. 58 Buckwalter  Buckwalter  Sept. 39 May —51 Toler Sept. 39 May —10 Maynard May —53 Bergida May —10 Maynard Nov. 47 Maynard Nov. 47 Maynard Mayna	Battery Analyst, The	Mann	Jan64
Budget Charger Nickel-Cad Charger BFO, Universal Bechman BFO, Universal Bechman Bechma			
Nickel-Cad Charger Blechman May .72 BFO, Universal Blechman Nov96 Capacitor Checker: Mickey-Mike, The Patrick Jan52 Electronic Games: Old Riddle—New Game Quiz Game Umpire Intercom, A Power Pack for Your Telephone Campour Telephone Amame Dropper, Electronic Photography: Enlarger Control Center Pollack Jan87 Power Supply, Triple-Y Toier July82 Receivers: All-American 5 Goes Flanagan & Friedman July38 Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Transmitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Bruce Sept89 Vari-Volter, Regulated Volume Limiter, Photoelectric Automatic Wattmeter, Wald's Sept		Blechman	Sept42
BFO, Universal Capacitor Checker: Mickey-Mike, The Electronic Games: Old Riddle—New Game Quix Game Umpire Intercom, A Power Pack for Your Telephone Name Dropper, Electronic Nov. 58 Jan. 112 Cenan Maynard Maynard May .51 Power Supply, Tripte-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, Polotectric Automatic Wattmeter, Magic Eye Wattmeter, Magic Eye Wattmeter, Ward Save Wattmeter, Magic Eye Wattmeter, Ward Save Buckwalter Patrick Dan			
Mickey-Mike, The Electronic Games: Old Riddle—New Game Quix Game Umpire Intercom, A Power Pack for Your Telephone Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Voil was a control of the control		Blechman	Nov96
Mickey-Mike, The Electronic Games: Old Riddle—New Game Quix Game Umpire Intercom, A Power Pack for Your Telephone Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Voil was a control of the control			
Electronic Games: Old Riddle—New Game Quix Game Umpire Intercom, A Power Pack for Your Telephone Cenan Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Transmitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transmistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Wattmeter, World's Wattmeter, World's Wattmeter, World's Wattmeter, World's Wattmeter, World's Wattmeter, World's		Patrick	Jan52
Quiz Game Umpire Intercom, A Power Pack for Your Telephone Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Wattmeter, Waldis Wattmeter, Waldis Wattmeter, Waldis  Cenan Maynard May51  Maynard  McEntee Buckwalter May53  McEntee Bergida May10  Maynard May53  MocEntee May53  MocEntee Bergida May10  Sept89  Maynard Nov47  Waltmeter, Waldis  Waltmeter, Waldis  Wattmeter, Magic Eye Stephens  Maynard  Maynard  Maynard  Jan100  Maynard  Stephens			
Intercom, A Power Pack for Your Telephone Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Vari-Volter, Regulated Yolume Limiter, Photoelectric Automatic Wattmeter, World's Wattmeter, World's Wattmeter, World's Wattmeter, World's Wattmeter, World's  Cenan Maynard Maynard July72 Maynard May53 Sept32 McEntee Buckwalter May51 Sept90 Maynard Nov47 Bruce Sept38 Worlder Maynard July47 Wattmeter, Magic Eye Stephens Jan100 Maynard July91 Wattmeter, World's	Old Riddle-New Game	Buckwalter	Nov58
Your Telephone Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Vari-Volter, Regulated Yolume Limiter, Photoelectric Automatic Wattmeter, Waldis Wattmeter, Waldis Wattmeter, Magic Eye Wattmeter, Waldis  Cenan Maynard Maynard July72 Maynard \$2 May51 Buckwalter Buckwalter Buckwalter May53 Bergida May10 Maynard Maynard May53 Sept39 May10 Maynard Maynard Nov47 Wattmeter, Magic Eye Wattmeter, Waldis Maynard July91 Wattmeter, Waldis	Quiz Game Umpire		Jan112
Name Dropper, Electronic Photography: Enlarger Control Center Power Supply, Triple-V Receivers:  All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radiol Remote Control: Transmitter and Receiver, R/C Seat Belts AOK!  Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM Volume Limiter, Photoelectric Automatic Watrmeter, Wald's September Stephens  Name Tropper, Electronic Policy Maynard July53 Sept82 Sept83 Sept84 Sept85 Sept89 Sept89 Sept89 Sept89 Sept89 Sept89 Sept84 Sept85 Sept89			
Photography: Enlarger Control Center Power Suppiy, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Warled's Pollack Jan87 July82 Bridan May102 Bergida May110 Sept89 Maynard Nov47 Bruce Sept89 Waynard Nov47 Bruce Sept89 Waynard Nov47 Waynard July91 Wattmeter, Magic Eye Wattmeter, Magic Eye Stephens Jan43 Wattmeter, World's	Your Telephone	Cenan	
Control Center Power Supply, Triple-Y Receivers: All-American 5 Goes Modern Compact BCer, The Juh khe Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Wattmeter, Walcet Wattmeter, Walcet Rolling May May .53 Bergida May .110 Sept89 Maynard Nov47 Kolbe Bruce Sept39 Maynard Nov47 Waynard Maynard July .47 Jan100 Maynard Stephens Jan100 Maynard July .91 Stephens Jan43	Name Dropper, Electronic	Maynard	May51
Power Supply, Triple-Y Receivers:  All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio! Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Bergida Sept			
Receivers: All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radio!  Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Vari-Volter, Regulated Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Wald's  Riangan & Friedman Davidson Sept			
All-American 5 Goes Modern Compact BCer, The Junk the Car—Save the Radiol Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, World's Wattmeter, World's  Flanagan & Friedman Davidson Sept38 Buckwalter Sept38 Bergida May110 Maynard Nov47 Florial Maynard Nov47 Wattmeter, Magic Eye Sept38 Nov77 Maynard July91 Maynard Mayna		Toler	July82
Modern Compact BCer, The Junk the Car—Save the Radio!  Remote Control: Trans- mitter and Receiver, R/C Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Wold's  Pariodoson  Friedman Davidson Sept			
Compact BCer, The Junk the Car—Save the Radio!  Remote Control: Trans- mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Wolld's  Wattmeter, Wolld's  Buckwalter Buckwalter Sept32 May. I10 Bergida May110 Bergida May110 Mater Sept32 Maynard Nov47  Sept32 Maynard Nov47  Hahn Jan100 Maynard July91 Wattmeter, Magic Eye Wattmeter, Wolld's			
Junk the Car—Save the Radio! Remote Control: Transmitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Maynard Nov. 47 Transmitter, License-Free FM TV Blab-Off Bruce Sept. 38 Voice Sept. 38 Voice Sept. 38 Nov. 47 Volume Limiter, Photoelectric Automatic Water Switch, Electronic Watmeter, World's Wattmeter, Magic Eye Wattmeter, World's			
Radiol Remote Control: Transmitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transsistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Waldia Wattmeter, Waldia Buckwalter  McEntee May53 McEntee May53 May10 Maynard M		Davidson	Sept32
Remote Control: Transmitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Toler Sept. 89 Transistor Tester, \$2 Maynard Nov. 47 Transmitter, License-Free FM Kolbe July 47 TV Blab-Off Bruce Sept. 38 Vari-Volter, Regulated Henry Nov. 77 Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Wald's Stephens Stephens		n . 1 . 11.	C -4 100
mitter and Receiver, R/C Seat Belts AOK! Scope Calibrator, Simple Transistor Tester, \$2 Transmitter, License-Free FM VBlab-Off Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Wold's		Buckwaiter	SeptIuz
Seat Belts AOK! Scope Calibrator, Simple Toler Transistor Tester, \$2 Transmitter, License-Free FM Kolbe TY Blab-Off Bruce Sept38 Vari-Volter, Regulated Henry Nov47 Volume Limiter, Photoelectric Automatic Water Switch, Electronic Water Majic Eye Stephens Wattmeter, Magic Eye Stephens Wattmeter, World's		14-5-4	Man 52
Scope Calibrator, Simple Transistor Tester, \$2 Maynard Nov47 Transmitter, License-Free FM TV Blab-Off Vari-Volter, Regulated Volume Limiter, Photoelectric Automatic Water Switch, Electronic Water, Waltmeter, Wald's Wattmeter, Wald's  Sept89 Maynard Sulphy47 Nov47 Hahn Jan100 Maynard July91 Stephens Jan43 Wattmeter, Wold's			
Transistor Tester, \$2 Transmitter, License-Free FM TV Blab-Off Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, World's Wattmeter, World's Wattmeter, World's  Maynard Stephens Jan43  Maynard July91  Stephens Jan43			
Transmitter, License-Free FM Kolbe July47 TY Blab-Off Bruce Sept38 Vari-Volter, Regulated Henry Nov77 Volume Limiter, Photoelectric Automatic Water Switch, Electronic Watynard July91 Wattmeter, Magic Eye Stephens Jan43 Wattmeter, World's			
FM Kolbe July .47 TV Blab-Off Bruce Sept38 Tv Stab-Off Henry Nov		маунаго	140447
TV Blab-Off Bruce Sept38 Vari-Volter, Regulated Henry Nov77 Volume Limiter, Photoelectric Automatic Water Switch, Electronic Watymeter, Magic Eye Wattmeter, World's		Valha	July 47
Vari-Volter, Regulated Henry Nov			
Volume Limiter, Photoelectric Automatic Water Switch, Electronic Wattmeter, Magic Eye Wattmeter, World's Wattmeter, World's			
Photoelectric Automatic Water Switch, Electronic Wattmeter, Magic Eye Wattmeter, World's  Photoelectric Automatic Maynard July91 Jan43		i tem j	.,,,,
Water Switch, Electronic Maynard July91 Wattmeter, Magic Eye Stephens Jan43 Wattmeter, World's		Hahn	Jan. 100
Wattmeter, Magic Eye Stephens Jan43 Wattmeter, World's			
Wattmeter, World's			
	Wattmeter, World's	2.0,0110110	
		Gaulin	Sept 108

January, 1965

# El's 1965 Index El's 1965 Index

C - Construction Project
F - Feature Article
TP - Theory & Practice
Name following title is author.
Page number follows the date.

#### AMATEUR RADIO

Amateur Radio				
Confidential	Anonymous	(F)	Jan.	50
Awards for Hams, SWLs,	7 1	(,,	••••	
BCBers, New!		(F)	Jan.	53
Coax Connectors, How to		(75)		
Wire Codeland Hama The Case	Whiteman	(TP)	Mar.	99
Codeless Hams, The Case of the	Karlin	(F)	Mar.	95
Countries List, El DX Club	IXG11111	(,,	17741.	
Official		(F)	Mar.	52
Crystals, Grind Your Own	Buckwalter	(F)	Nov.	98
CO Sender: CO de Tape	Friedman	(0)	Mar.	
CW Monitor, Parasite	Friedman Brier	(C)	Jan. May	66
Electronic Keyer, I-Tube FCC Examiner, Confessions	prier	(0)	May	73
of an	Pyle	(F)	Jan.	75
Flea-Power Hams: The				
Davids in Goliath Land	Brown	(F)	July	74
Ham Radio Brawl, That	Rosa	(F)	Jan.	83
Ham Station for \$100 to \$1,000. A	Hertzberg	(F)	Mar.	45
Hook Anything to	Herizberg	(1)	IVIGI.	
Anything, How to	Mann	(F)	July	,36
Membership List, El DX				
Club		(F)	May	96
Modulation Monitor: Watch Your Modulation!	Friedman	(C)	July	54
Museums: Visiting the	THEGINAII	101	0417	
Ghosts of Radio	Pyle	(F)	Nov.	67
Official Observers: Our				
Friendly Secret Police	Lincoln	(F)	July	93
Phone Patches, What You Should Know About	Buckwalter	(F)	May	54
Rarest DX Of All	Bower	(F)	July	87
Receiver, 3-Tube All-Band	Green,			
	Charles	(C)	Sept.	93
Receiver: VHF	Green,			45
Broadspanner	Charles	(C)	Jan. May	
Spectrum Monitor, CB Transmitters:	Kolbe	(C)	·via y	40
QRP Special for Pip-				
Squeak Hams	Green, Clare	e (C)	Sept.	83
The Attaché 80	Green,			
	Charles	(C)	Nov.	53

#### AUDIO, STEREO & HI-FI

Coax Connectors, How To Wire (TP) Mar99  Generator, Integrated Circuit Square Wave Headphones, Walking Wireless (Yle (C) Sept55  Hook Anything to Anything, How to Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable Guide to (TP) Mar99  Kyle (C) Mar99  Kyle (C) Sept55  Mann (F) July36  Glenn (C) Jan73  Blechman (C) Nov86
Wire Generator, Integrated Circuit Square Wave Headphones, Walking Wireless Hook Anything to Anything, How to Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable  Whiteman (TP) Mar99  Maynard (C) Mar31  Kyle (C) Sept55  Kyle (C) Sept55  Glenn (F) July36  Glenn (C) Jan73
Generator, Integrated Circuit Square Wave Headphones, Walking Wireless Hook Anything to Anything, How to Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable  Gircuit Square  Kyle  Kyle  (C) Sept55  Mann (F) July36  (C) Jan73  Blechman (C) Nov86
Circuit Square Wave Maynard (C) Mar31 Headphones, Walking Wireless Kyle (C) Sept55 Hook Anything to Anything, How to Mann (F) July36 Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable  CO Nov86
Headphones, Walking Wireless Hook Anything to Anything, How to Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable  Kyle  Kyle
Wireless Kyle (C) Sept55 Hook Anything to Anything, How to Mann (F) July36 Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable
Hook Anything to Anything, How to Impulse Switch, Automatic Level Meter for Budget Recorders, Plug-In Medium-Fi, A Reasonable
Anything, How to Mann (F) July36 Impulse Switch, Automatic Glenn (C) Jan73 Level Meter for Budget Recorders, Plug-In Blechman (C) Nov86 Medium-Fi, A Reasonable
Impulse Switch, Automatic Glenn (C) Jan73 Level Meter for Budget Recorders, Plug-In Blechman (C) Nov86 Medium-Fi, A Reasonable
Level Meter for Budget Recorders, Plug-In Blechman (C) Nov86 Medium-Fi, A Reasonable
Recorders, Plug-In Blechman (C) Nov86 Medium-Fi, A Reasonable
Medium-Fi, A Reasonable
Guide to Hoffman (F) Sept69
Organs That Oscillate, The Gray (F) May27
Preamp, Plug-In Blechman (C) Sept41
Recordings: Gurgle,
Chuckle, Oink-Yeah!
Yeah! Yeah! Gilmore (F) Mar80
Speaker Simulator, Stereo Johnson (C) July57
Speaker, Sub-Mini Herman (C) Nov29

Speakers: What the Heck's a XAM? Stereo: 3 Parts == 3rd	Sommers	(F)	July	45
Channel Tape, Far-Out Facts on Tapes for Touring	Salm Angus Angus	(C) (F) (F)	Jan. July Nov.	52
Tape from Any Radio or TV, How to Tape Heads, Rx for	Harlow Glenn	(F)	Nov. May	108

#### CITIZENS BAND

				-
A-A Turner Shuhanh				
Antenna Tuner: Skyhook Doctor	Mann	(C)	May	60
CB. A New Look for?	Buckwalter	(C) (F)	Jan.	3B
CB Antennas, Common Sense About				
CB Corner:	Buckwalter Buckwalter	(F)	July	29
Is NA Really for CB	DUCKWOITE	(1)		
Radio?			Jan.	100
CB's Secret Weapon			Mar.	103
The Startling Truth Ready When You Are, CB Color It Busy			May	
Color It Busy			July	90
The Infallible Filter			Nov.	
CB, The Serious Side of	Probett	(F)	July	100
CB, Tough Going For CB, What's Ahead for?	Levine Walker	(F)	May	59
Channel Slicer, CB	Mann	(C)	May Jan.	39
Coax Connectors, How to	THE STATE OF	(0)	Jan.	17
Wire	Whiteman	(TP)	Mar.	99
Codeless Hams, The Case	Karlin	/EN		
of the Crystals, Grind Your Own	Buckwalter	(F)	Mar. Nov.	95
Headphones, Walking	Dackwall of	( ,	1404.	70
Wireless	Kyle	(C)	Sept.	55
Hook Anything to	14	151		
Anything, How to Installation: Mobile Magic	Mann Etta	(F)	July	72
license How to Lose Your	CIIO	(F)	Sept.	
License, How to Lose Your Manufacture: Behind the				
Scenes in CB		(F)	Jān.	90
Modulation Monitor: Watch Your Modulation!	Friedman	(C)	July	54
Mini-Clipper, CB	Friedman	(C)	Mar.	
Oscillators, Optimum	Toler	(TP)	Mar.	92
Oscillators, Optimum PA to CB, Add	Friedman	(C)	Nov.	95
Phone Patch, Tie Your Telephone to Your				
Transceiver with a	Toler	(C)	May	51
Phone Patches, What You				
Should Know About	Buckwalter	(F)	May	54
Power Supply: Make Any	Friedman	(C)	May	65
5-Watter Portable Receiver, 3-Tube All-Band	Green,	(5)	MIN	05
Received 5-100e An-balla	Charles	(C)	Sept.	93
Receiver: VHF	Green,	101		
Broadspanner	Charles Stephens	(C) (F)	Jan. May	63
Sideband Scorecard for CB Smokey Joe, The Search	Stephens	(,,	IVIGY	93
for	Buckwalter	(F)	Sept.	77
Spectrum Monitor	Kolbe	(C)	May	
Survival Course for CBers	Friedman	(F)	Sept. Jan.	
Systems: Slide-Rule CB Talk Power, Straight Talk	Burr	(17)	Jan.	07
About	Herman	(F)	May	
Transceivers, Those Totable	Fischer	(F)	May	75
Transmitter: Part 15	C:	(C)	May	55
Powerhouse Transmitter That Howls, The	Simms Winklepleck	(0)	May	68
Volume Leveler, CB	Toler	(C)		31

#### KIT REPORTS

Crystal Tuner, Fancy (J. W. Miller 565)	Nov48
Exposure Meter (Knight-Kit KG-275)	Mar98
Ham Station, Budget (Conar 400 & 500)	July68

## El's 1965 Index El's 1965 Index

Handbook of

Organ, Electronic (Heathkit GD-983)	May31
Preamplifier, All-Transistor (Acoustech IV)	Jan98
Speaker System, Bookshelf (Electro-Voice Coronet)	Sept59
Tape Recorder, Video (Wesgrove VKR-500)	Sept64
Transceiver, CB (EICO 777)	May82
VTVMs, Grandaddy of the (RCA WV98C-K)	Nov90

#### SHORT-WAVE LISTENING

Alhambra Affair, The	Carter	(F)	Mar101
Awards for Hams, SWLs, BCBers, New!		(F)	Jan53
Countries List, El DX Club Official		(F)	Mar52
Fringes, Beyond the	Carter	(F)	Nov73
Hook Anything to	Mann	(F)	July36
Anything, How to	Bower		Mar70
Iron Curtain, Radio's	Kneitel &		
Inments A Stance Tues	Leinwoll	(F)	Jan29
Jammers, A Strange Turn for the	Haydon	(F)	Nov10
Log 100 Countries, How to		(F)	May 106
Membership List, El DX		(F)	May96
Pirates, Pursuing the		(F)	Sept10
Preselector, S-Niner	Friedman	(C)	Jan57
Rarest DX of All Receiver, 3-Tube All-Band	Bower Green	(F)	July87
	Charles	(C)	Sept93
Receiver: VHF	Green,	(0)	
Broadspanner Ships at Sea, All the	Charles Kneitel	(C) (F)	Jan45 Sept34
SWL Club Shape-Up	Carter	(F)	July56
VOA, DX Guide to	Bower	(F)	Nov92

#### Handbook of Awards for Hams, SWLs, BCBers, New! Braille, Electronic CATY, A New Look for Coffee, Milk or TY? Computer, Half-Pint Cops, Crooks & Computers Countries List, El DX Club Official Jan. ...53 Sept. ..108 Levine Swathmore Nov. ...34 Swathmore .86 July ... Meisels Nov. ...21 Jurgens Sept. ....68 Official Mar. .. Dream that Won't Die, The July ....25 Mar. ...55 Gilmore Electronics and Black Gold Electro-Toot School Home-Study Electronics, Look What's Happened Jackson Kutschbach July ...112 Locke to Jan. ....92 How Do Planes Find Their Way? Deems \* July ....64 Ionosphere, New Light from the fron Curtain, Radio's Swearingen July ....76 Kneitel & Leinwoll Jan. ....29 Jammers, A Strange Turn for the Membership List, EI DX Haydon Nov. ...10 Club Model Trains, Radio May ....96 Control for Official Observers: Our Friendly Secret McEntee Jan. ....33 Police Lincoln July ....93 Organs that Oscillate, The Radio's Impossible Impasse Robot Rembrandt Gray, Conway May ....27 July ....59 Mar. ....91 Scouts, Electronic Mar. ..117 Servicing, New Look in Tapes for Touring Telcan, You Say? Daniels Mar. ....68 Angus Angus Nov. ....59 July .. 102 YOA, DX Guide to Bower Nov. ....92

Hertzberg

Sept. ...:47

#### THEORY AND PRACTICE

ABCs Of Radio:	Frve	
Part I: The Transmitter	1176	Sept25
Part II: The Carrier		Nov49
Beginner's Page:	Morris	NOV47
The Wheatstone Bridge	MOTTIS	1 101
The Power Transformer		Jan101
Tubeless Power		Mar90
		May84
Free-Power Radio		July78
Lemonade Battery		Sept54
Beginner's Corner:	Morris	
The Dope on Coils		Nov46
CCs, How to Beat the	Walker	Nov100
Coax Connectors, How to		
Wire	Whiteman	Mar99
Crystals, Grind Your Own	Buckwalter	Nov98
Ignition, A Practical		
Transistor	Henry & Pope	May88
Integrated Circuits for		141d y00
Hobbyists	Maynard	Mar29
Oscillators, Optimum	Toler	
Particle Accelerator.	Totel	Mar92
300,000 Volt	•	
	Summer	Nov37
Talk Power, Straight Talk		
About	Herman	May79
Tape from Any Radio or TV,		
How to	Harlow	Nov108
TV Picture Tube, How to		
Change a	Margolis	Nov 84

#### SPECIAL FEATURE ARTICLES

Alhambra Affair, The	Carter	Mar.	101
Automotive Flactonice		101011	

#### SPECIAL CONSTRUCTION PROJECTS

Ammeter Adaptor, VTVM	Graf	July63
Analyst, 7-In-I	Frantz	July41
Beam Finder	Mann	Sept91
Broadcast Station, Build	WIGHIN	3ep171
Your Own	Toler	July32.
Call Box, TV		
	Davidson	July90
Exposure Meter, Enlarging	Mann	Mar48
Generator, Integrated		
Circuit Square-Wave	Maynard	Mar31
Headphones, Walking		
Wireless	Kyle	Sept55
Ice Alarm, Driver's	Summer	Mar73
Impulse Switch, Automatic	Glenn	Jan73
Integrated Circuit		
Broadcast Radio	Kolbe	Mar34.
Intercom, All-Master	Verner	Nov79
Intercom, Switchless	Walker	Jan41
Light Beam, Talk on a	Lininger	Mar64
Metronome, Modular	Blechman	Jan64
Miles-Per-Gallon Indicator/	bleciiiiaii	Jan
Tachometer	Summer	July 70
Ohmmeter, Canned	Patrick	Nov65
Particle Accelerator.	Patrick	140463
300,000 Volt	C	NI 27
	Summer	Nov37
Phone Tap, Souped-Up	Bruce	Jan96
R/C Transmitter,		
Blockbuster	McEntee	Mar40
Receivers:		
Skyway Monitor	Lininger	July96
VHF Broadspanner	Green,	
	Charles	Jan45
Speed Control, Full-Range		
SCR	Thorpe	Sept73
Telephone Amp, \$1	Patrick	Sept80
Tone Source, All-Purpose	Mann	Nov70
Touch Switch, Magic	Molinara	Sept37
TV Booster, Sun-Powered	Redmond	July48
TV Sweep Tester, Wireless	Toler	Nov103
Voltage Regulator: Solid-	10161	1101103
State VR for Your Car	Effenberger	Nov75
Sidile TR for Tour Car	cueuperder	1404/5

# El's 1966 Index El's 1966 Index

C—Construction Project
F—Feature Article
TP—Theory & Practice
Name following title is author.
Page number follows the date,

#### AMATEUR RADIO

Antenna, Try an Attic	Buckwalter	(TP)	Sept76
Award for Hams & SWLs.			
All Continents		(F)	Jan71
Award Winners, El DX Club		(F)	Jan106
Band Spreader, Varactor	Redmond		July73
Brass Pounders, Last Stand			
for	Robberson	(F)	Mar49
Construction Tips:			
How Do YOU Do It?	Green,		
	Charles	(TP)	Jan64
Try These		(TP)	Jan56
Filters That Really Do	Buckwalter	(TP)	Sept90
Receiver: 2 Meters on 2			
Tubes	Green, Clare	e (C)	Sept69
Spies, How to Eavesdrop			
on Real	Kneitel	(F)	May81
Tape Your Traffic, Why Not?	Lincoln	(F)	Nov59
Transmitters:			
Channelized Ham			
Transmitter	Alexander	(C)	July65
The Flexible Flea	Green,		
	Charles		May69
The Mini-Mitter	Alexander	(C)	Mar27
VOX, Junk-Box	Toler	(C)	Jan83

#### AUDIO, STEREO & HI-FI

Construction Tips:				
How Do YOU Do It?	Green,			
	Charles	(TP)	Jan.	64
Try These		(TP)	Jan.	56
FM Stations, Pocket-Size	Rasmussen	(TP)	Sept.	73
ICs Go Civilian	Dillard	(F)	Nov.	29
Speakers:				
Big Boom Box	Toler	(C)	May	100
Life Goes on & on at 40	Gilmore	(F)	Mar.	
Tope Recording:		. ,		
Better Tapes, 7 Steps to	Etta	(F)	Sept.	45
Car, Put Tape in Your	Davidson	(C)	May	
	Henry	(C)	July	
Compressor, Tape	riemy	(0)	July	
Consumer Tape Recorders,				
A Pro Takes a Look at	Gaulin	(F)	July	E2
	Gaulin	(F)	July	53
Historical: The Day Tape		151		40
Was Born	Swathmore	(F)	July	49
Shutoff to Your Tape				
Recorder, Add an				
Automatic	Karmin	(C)	Sept.	88
Tape Your Traffic, Why				
Not?	Lincoln	(F)	Nov.	59
Tonics for Tape				
Recorders, Autumn	Burstein	(TP)	Nov.	97
Travel: Through Europe				
with a Tape Recorder	Angus	(F)	July	61
Tubes Really Amplify, Do?	Andariese	(TP)	Jan.	105
VOX, Junk-Box	Toler	(C)	Jan.	83

#### CITIZENS BAND

Alignment Generator, CB	Friedman	(C)	Nov.	65
Antenna Control Center	Simms	(C)	May	62
Band Sweeper, CB	Winkelpleck	(C)	Jan.	95
Boondoggle, CB's Biggest	Karlin	(F)	May	59
Clubs: Who Speaks for CB?	Karlin	(F)	Jan.	8
CB Corner:	Buckwalter	(F)		
Two for the Money			Jan.	67
Instant Enforcement			Mar.	56
Wandering Watts			May	51
Down to the Sea.				
but Where's CB?			July	59
The Case of the Fake				
Maydays			Sept.	87
Boil Some Water			Nov.	87
Construction Tips:				
How Do YOU Do It?	Green,			
	Charles	(TP)	Jan.	64
Try These		(TP)	Jan.	56
Equipment, What's Really				
New in CB	Walker	(F)		
Filters That Really Do	Buckwalter	(TP)		
Pager, CB	Friedman	(C)	Sept.	38
Rock Checker, All-Transistor	Friedman	(C)		
Rules, Life with the New	Buckwalter	(F)	May	39
Sun-Powered CB	Friedman	(C)	May	57
Used CB Equipment, The				
Truth about	Levesque		Nov.	
VOX, Junk-Box	Toler	(C)		
Walkie-Talkie Tester	Mann	(C)	May	43

#### SHORT-WAVE LISTENING

		_	
Antenna, Try an Attic	Buckwalter	(TP)	Sept76
Award for Ham & SWLs,			
All Continents		(F)	Jan71
Award Winners, El DX Club		(F)	Jan 106
Band Spreader, Varactor	Redmond	(C)	July73
Blue Eagle, The Fantastic			
Flight of the		(F)	May27
Booster, Nuvistor SWL	Friedman	(C)	Nov82
Converter, I-Transistor	Green,		
Short-Wave	Charles	(C)	July29
DX Guide to Europe, A	Bower	(F)	Sept97
DX. Presidential	Bower	(F)	Mar67
Filters That Really Do	Buckwalter	(TP)	Sept90
Receivers, A Guide to SWL	Friedman	(F)	
Receiver, VLF Full Band	Green.		
	Charles	(C)	Mar39
Satellite Transmissions:		• •	
DX à Go Go	Carter	(F)	Mar 80
Spies, How to Eavesdrop on		• •	
Real	Kneitel	(F)	May81
Turncoats, Tuning in the	Bower	(F)	Nov74
25 Meters, Big Troubles on	Carter	(F)	
WWV's New Home	Lincoln	(F)	Nov33
At At 1 2 Lines   Links		4. 1	

#### THEORY & PRACTICE

ABCs of Radio:	Frye		
Part III: Trapp <mark>ing the</mark> Signal		Jañ.	75
Part IV: The		Mar.	57

Electronics Illustrated

# El's 1966 Index El's 1966 Index

Part V: Detection		May	93
Part VI: Signal to Sound		July	39
AC/DCs, Soup-Up for	Cenan	May	31
Antenna, Try an Attic	Buckwalter	Sept.	76
Battery, Can You		-	
Recharge Any?	Mann	Jan.	51
Battery, The Case of the			
Vanishing	Locke	Nov.	88
Beginner's Corner:	Morris		
Flip-Flops		Jan.	80
The Case of the Invisible			
Gate		Mar.	87
Those Multiplying Cells		May	
Dr. Zener's Diode		July	
The Nimble Neon		Sept.	
3 Basic Radios		Nov.	
Color TV, What's the Worst?	Margolis	Nov.	
Construction Tips:	margon,	1404.	
How Do YOU Do It?	Green, Charles	Jan.	44
Try These	Olecui, Charles	Jan.	
Current Theory: Was Ben		oun.	
Franklin Crazy?	Frye	Sept.	29
FM Stations, Pocket-Size	Rasmussen	Sept.	
Filters That Really Do	Buckwalter	Sept.	90
ICs Go Civilian	Dillard	Nov.	29
Magnet, World's Biggest	Locke	July	80
Meter Saver, Six-Bit	Stephens	Mar.	86
Plezoelectricity: Squeeze			
Me and I'll Shock You	Shields	July	95
SCR Speed Controls, A Full			
Report on	Mann	Sept.	
TV, Flat	Buckwalter	Jan.	29
TV Lead-in: Is Coax Really Better for TV?	Buckwalter	Jan.	100
TV Test Patterns, What Do	DUCKWAITER	Jan.	100
They Really Mean?	Margolis	July	108
Thermoelectricity,		,	
Experiments in	Summer	Jan.	37
Tubes Really Amplify, Do?	Andariese	Jan.	105

#### SPECIAL FEATURE ARTICLES

Antiques: His Radios		
Never Die		July47
Battery, Can You Recharge		
Any?	Mann	Jan51
Battery, The Case of the		
Vanishing	Locke	Nov88
Blue Eagle, The Fantastic		
Flight of the		May27
Citizens Band:		
Boondoggle, CB's Biggest	Karlin	May59
Rules, Life with the New	Buckwalter	May39
Used CB Equipment,		
The Truth about	Levesque	Nov108
DX, Presidential	Bower	Mar67
Color TV, What's the		
Worst?	Margolis	Nov50
FM Stations, Pocket-Size	Rasmussen	Sept73
Historical: The Day Tape		
Was Born	Swathmore	July 49
ICs Go Civilian	Dillard	Nov29
Magnet, World's Biggest	Locke	July80
Overseas Job in Electronics,		
Want an?	Locke	Sept54
Piezoelectricity: Squeeze		
Me and I'll Shock You	Shields	July95

Radio, World's Toughest?		Sept94
SCR Speed Controls, Full		
Report on	Mann	Sept64
Satellite Transmissions:		
DX à Go Go	Carter	Mar80
Speakers: Life Goes on & on		
at 40	Gilmore	Mar45
Spies, How to Eavesdrop on		
Real	Kneitel	May81
TV Lead-in: Is Coax Really		
Better for TV?	Buckwalter	Jan100
TV Test Patterns, What Do		
They Really Mean?	Margolis	July 108
Thermoelectricity,		
Experiments in	Summer	Jan37
Turncoats, Tuning in the	Bower	Nov74
UL Label, The Truth about		
That	Angus	May97
Weather Wise, Why We're		11. 000
So	Sands	July89
WWV's New Home	Lincoln	Nov33

#### SPECIAL CONSTRUCTION PROJECTS

AC/DCs, Soup-Up for	Cenan	May31
Bridge to Nowhere	Henry	May 86
CB Pager	Friedman	Sept38
Computer, Electronic	Grossman	Nov39
Computer, Low-Cost Pot	Simms	Jan57
Construction Tips:		
How Do YOU Do It?	Green, Charles	Jana64
Try These		Jan56
Light Dimmer, Universal	Walker	Jan47
Meter Saver, Six-Bit	Stephens	Mar85
Metronome, The Syncopated	Grossman	Mar75
Phonecom, The	Glenn	Mar68
Photography:		
Flash, Fail-Safe Slave	Kyle	Jan33
Strobe, Super-Speed	Kyle	Mar62
R/C Receiver for 72 mc	Garrett	Nov101
Radio, Build a 1-FET	Green, Charles	Sept49
Rock Checker, All-Transistor	Friedman	July85
Signal Injector, Probe-Size	Green, Charles	Nov55
Slot-Car Lap Timer	Foler	July43
VOX, Junk-Box	Toler	Jan83

#### KIT REPORTS

Amplifier, 80-Watt Transistor (Scott LK-60)	May74
CB Transceivers: (Heathkit GW-12A)	May52
(Lafayette Comstat 9)	
(Knight-Kit C-540)	
Compressor-Preamp (Knight-Kit C-577)	Nov6
Keyer, Low-Cost Electronic	
(Heathkit HD-10)	July9
SCA Sub-Carrier Detector	
(Music Associated)	Jan54
Tape Deck, Stereo (Knight-Kit KG-415)	Mar32
Transceiver, 3-Band 3-Mode (EICO 753)	Nov9
Treasure Finder, Build-It-Yourself	
(Conar 100TUK)	Sept51
VHF Receiver (Knight-Kit KG-221)	Sept87

January, 1967

## El's 1967 Index El's 1967 Index

C—Construction Project
F—Feature Article
TP—Theory & Practice
Name following title is author.
Page number follows the date.

#### AMATEUR RADIO

Antennas:				
Antenna Switcher, Remote	White	(C)	Nov.	66
Law: Wanna Bet Your Antenna Is Legal?	Copeland	(TP)	Sept.	50
Tower Mount, Sloping- Roof Award for Hams & SWLs.	Hertzberg	(C)	Jan.	102
UN-25 Crystal Calibrator, 1-mc	Friedman			79
FM Hams—The New Breed Field-Strength Meter.	Lincoln	(C) (F)	Nov. July	
Super-Sensitive Ham Radio Habit, How I	Herman	(C)	Jan.	60
Kicked the Medicine: Radio's Invisible	Rosa	(F)	Sept.	95
Doctor Mobile: 40 Meters on 2	Lo Bello	(F)	July	93
Wheels Oscillator, Gate-Dip Propagation: Sunspots, An	Green, Clare	(F) (C)	Mar. May	
Expert Looks at the New Look in QSLs, Cute, Quaint, Kook Receivers:	Leinwoll Pyle	(TP) (F)	May Mar.	
80 Meters, 3 Transistors for 160-Meter Ham Station	Green, Charles White	(C)	Nov. July	45
Transmitters: 40 Meters, I-Bottle Xmitter for 160-Meter Ham Station	White White	(C)	Mar, Sept.	
100-Meter mam Station	<b>ч</b> піте	(0)	Jept.	67

#### AUDIO, STEREO & HI-FI

Mixer, All-Purpose Audio L-L-L-L-LP, An Phonograph, Transistorize	Toler Morris		Mar. Nov.	
Your	Kell	(C)	Sept.	105
Speakers:				
Twin Fin	Kolbe	(C)	Jan.	103
E1-8x	Kolbe	(C)	Jan. Nov.	91
Tape Recording:				
Monitor Head to Your				
Recorder, Add a	Glenn	(C)	May	114
Pocket Tape Recorders,		,-,		
Consumer Report on	McEntee	(F)	July	. 71
Tapes Last Longer,		٧٠,	,	
How to Make	Angus	(F)	Sept.	84
Tape Splicer, Wanted:	g	4.7		
a Good	Friedman	(F)	Mar.	57
Test Records: What Do		٠.,		
They Really Test?	Angus	(F)	Jan.	87
YU Meter: The Amazing	9 = -	. ,		
Rubber Ruler	Glenn	(TP)	Mar.	.128
Wattmeter, Direct-Reading		,		
Audio	Richards	(C)	Nov.	80
		, ,		

#### CITIZENS BAND

Accessories, The Surprising Truth About CB	Friedman	(E)	Mar.	103
CB Dying, Is? CB in Your Car, The Easy	Simms		May	
Way to Install	Toler	(C)	May	58

Clubs:				
CB Clubs, The Truth				
About	Levesque	(F)	May	71
Emergencies, Setting Up		(.,	,,,,	, 1
Your CB Club for	Levesque	(E)	Sept.	20
Control Console, CB	Buckwalter		July	
Converter, Pocket CB	Green,	(0)	3019	70
	Charles	(C)	Sept.	47
DXing for CBers: Legal	Foulkes	/E	May	42
FCC, Wanna Get in	1 Oblkes	(, )	IVIGY	02
Trouble With the?	Karlin	(E)	July	20
Field-Strength Meter.	Kariiii	(11)	July	30
Super-Sensitive	Herman	ICI	Jan.	40
HELP on the Way, Is?	Levesque		Nov.	
Mobile Noise, Stamp Out	Stephens		May	
Mod/Power Meter for CB.	Stephens	(0)	IVEQY	00
In-Line	Friedman	(C)	Nov.	38
Modulation Scope, Vest-	ricaman	(0)	1101.	90
Pocket	Friedman	(C)	May	49
Oscillator, Gate-Dip	Green, Clar			
Output Meter for Solid-	Orocii, Olai	٠ ,٠,	14.4	
State CB Rigs	Mann	(C)	Jan.	49
Walkie-Talkies:		(-,		
Easy Repairs for Walkie-				
Talkies	Davidson	(TP)	Jan.	94
Win-Tenna for Walkie-				
Talkies, The	Blechman	(C)	Mar.	96
		,		

#### KIT REPORTS

CB Transceiver (Knight-Kit Safari III)	Nov.	102
Engine Analyzers (Eico 888, Knight-Kit KG-375)	Mar.	
FM Receiver, Stereo (Heathkit AR-14)	Jan.	90
Guitar, Electric (Heath TG-36)		
and Amplifier (Heath TA-16)	July	75
Keyer, Electronic (Eico 717)	Nov.	95
Power Supply, Experimenter's (Viking PZ-121)	Mar.	56
Speaker System, Bass Reflex (Lafayette Lowboy)	May	89
Short-Wave Receiver, Budget All-Band (Eico		
711)	Sept.	30
Tape Deck, Stereo (Heath/Magnacord AD-16)	Sept.	

#### SERVICING

Audio Wattmeter, Direct-		
Reading	Richards (C)	Nov80
Batteries, Char-Analyst for	Mann (C)	July83 Sept31
Capacitor Checker, Micro	Mangieri (C)	Sept31
Crystal Calibrator,		
I-Megacycle	Friedman (C)	Nov57
Field-Strength Meter,		
Super-Sensitive	Herman (C)	Jan60
Oscillator, Gate-Dip	Green, Clare (C)	May31
Output Meter for Solid-		
State CB Rigs	Mann (C) Buckwalter (TP)	Jan49
Scope, Primer on the	Buckwalter (TP)	May74
SW Signal Generator,		
Crystal-Controlled	Glenn (C)	July67
Signal Tracer Built in a		
Probe	Green, Clare (C)	Mar/4
TV Traps, Beware of Your	Adv C. (TD)	NI 103
Own	Margolis (TP)	Nov103
Walkie-Talkies, Easy	D (TD)	1 04
Repairs for	Davidson (TP)	Jan74

#### SHORT-WAVE LISTENING

Antennas: Mini Vertical for SWLs, A Wanna Bet Your Antenna	Buckwalter	(C)	Sept92
is Legal?	Copeland	(F)	Sept50
Award for Hams & SWLs, UN-25		(F)	Jan79
Crystal Calibrator, I-Megacycle DXIng:	Friedman	(C)	Nov57
Africa, The Many, Many Voices of	Bower	(F)	Mar[.]5

# El's 1967 Index El's 1967 Index

Apollo Signals From the Moon, DX of the			
Century	Ellington	(F)	July25
Apollo, The Latest on DXing		(F)	Nov114
Long-Wave Broadcasting, The Forgotten World of	Bower & Levins	(F)	Nov96
Middle East, How to DX		451	
Intrigue in the South Pacific DX	Bower	(F)	May38 Sept74
Vietnam and Its	Bower	(F)	3ept,/4
Neighbors, DXIng	Bower	(F)	Jan92
Propagation: An Expert	00	. ,	Jun
Looks at the New Look in			
Sunspots	Leinwoll	(F)	May116
QSLs, Cute, Quaint, Kook	Pyle	(F)	Mar112
Radio Americas and the CIA	Kneitel	(F)	Sept27
Radio Swan Hoaxer,			
Confessions of a	Kneitel	(F)	May98
Receivers:	C	101	1- 15
All-Bander, 1-Tube Jet Eavesdropper	Green, David	(C)	Jan65
	Green, Charles	(C)	Mar!!!
VHFer, Band-Switched	Green,	101	N4. 0F
Short-Wave Schedule,	Charles	(C)	May85
24-Hour		(F)	Mar77
Signal Generator, Crystal- Controlled SW	Glenn	(C)	July67

#### SPECIAL CONSTRUCTION PROJECTS

Antenna, For Super TV Try		
a Rhombic Audio Wattmeter, Direct-	Walker	Mar38
Reading	Richards	Nov80
Batteries, Char-Analyst for	Mann	July83
Capacitor Checker, Micro	Mangleri	Sept31
Crystal Calibrator,	Friedman	Nov57
Dimmer, In-A-Socket	Mann	May27
Field-Strength Meter	Metti	May2/
Super-Sensitive	Herman	Jan60
Musical Instruments:		
Bongos, Electronic	Maynard	Mar25
Guitar Amp, Go-Go	Mann	Mar45
Gultar Broadcaster, FM	Glenn	Jan38
Reverb for Guitar, Go-Go	Saville	Sept56
Oscillator, Gate-Dip Output Meter for Solid-	Green, Clare	May31
State CB Rigs	Mann	Jan49
Phone Beeper	Crowhurst	Nov72
Phonograph, Transistorize		
Your	Kell	Sept105
SW Signal Generator,	27	
Crystal-Controlled	Glenn	July67
Signal Tracer Built In a	Green, Clare	Mar74
Teaching Machine, Build	Orden, Ordre	Mai.
Your Own	Maynard	Nov29
Telephone Answering Set,		
Automatic	Blechman	July41
Tele-Spy, 008	Toler	Jan83

#### SPECIAL FEATURE ARTICLES

Antennas: No Room at the	Salm	July102
Automotive:		
Car Radios Get, How Much Better Can?	Walker	Nov75
Electric Cars, The Secret	Walker	1404/5
of the New	Locke	Mar41
Aviation: A Collision-		
Avoidance System for	Buckwalter	Nov49
Planes Battery: The Low-Down on	buckwaiter	140447
Those Low-Cost Chargers	Friedman	Jan74

Careers:		
GI BIII, Q & A About the		
New	Dillard	Mar92
	Dillard	Mar72
Medical Electronics for		
You, A Career in?	Hill	Nov41
Radio Operators Wanted	Surpin	Nov70
Dominoes, Electronic	Carlson	Sept43
	Carison	зерт43
Electron Microscope, The		
Small, Small World of the	Busse	Sept102
Ham Radio Habit, How I		
Kicked the	Rosa	Sept95
Hertz, Will Success Spoil	KUSA	Jep173
meriz, Will Success Spoll		
Heinrich?	Cartwright	Mar98
L-L-L-L-LP. An	Morris	Nov87
Medicine:		
Bitemeter, Mosquito-		
Powered	Levine	Jan ! 10
Quacks, The Shocking		
Facts About		
Electronic	Kaplan	May93
Radio's Amazing	Kabiali	WILLY73
Medicine Man	Aithouse	Mar61
Radio's Invisible Doctor	Lo Bello	July93
Military: Amazing Marvels		
from Ft. Huachuca, The	Locke	Jan 29
	LOCKE	Jan 27
Press Wireless: The Farm of		
the Shy Glant	Buckwalter	Jan56
Propagation: An Expert		
Looks at the New Look in		
	Leinwoll	11.
Sunspots	Leinwoll	May116
Radio Americas and the		
CIA	Kneitel	Sept27
Radio Swan Hoaxer		
	Kneltel	May98
Confessions of a	Kneitel	мау ув
Tape:		
How to Make Tapes Last		
Longer	Angus	Sept84
Pocket Tape Recorders.	- till gar	
		1.1. 21
Consumer Report on	McEntee	July71
Tape Splicer, Wanted: a		
Good	Friedman	Mar57
Test Records Really Test.		
		Jan87
What Do Those?	Angus	Jan5/
Transistor Radio Scandal,		
The	Gregory	July56
TV Splitters, How Good		
Are?	Held	July _108
Ares	rield	9417 -100

#### THEORY & PRACTICE

the state of the s		
ABCs of Color TV:	Frve	
Part I: Fundamentals		Jan41
Part II: Colorimetry		Mar29
Part III: Color Picture Tu	be	May79
Part IV: Transmitting Col		July61
Part V: Color Receiver		Sept77
Aniennas:		
Rhombic Antenna, For		
Super TV Try a	Walker	Mar38
Skyhook, Flying		Mar137
Wanna Bet Your Antenna		
Is Legal?	Copeland	Sept50
Beginner's Corner:	Morris	
The Thermistor		Jan107
The Case of the Buried		
Treasure		Mar119
Less Noise-More Signal		May 107
Car Radios Get, How Much		
Better Can?	Walker	Nov75
Electric Cars, The Secret of		
the New	Locke	Mar41
Scope. Primer on the	Buckwalter	May74
Teaching Machine, Build		
Your Own	Maynard	Nov29
TV Repair Traps, Beware of		
Your Own	Margolis	Nov103
TV Splitters, How Good		
Are?	Held	July 108
VU Meter: Amazing Rubber		
Ruler, The	Glenn	Mar128
Walkie-Talkies, Easy		
Repairs for	Davidson	Jan94

## El's 1968 Index

C-Construction Project F-Feature Article TP-Theory & Practice Name following title is author. Page number follows the date.

#### AMATEUR RADIO

Antennas:				
Ground-Plane, 6-Bit	Maziarz	(C)	Jan.	10.
Tuner, Compact Antenna	Richards	ìčí		. 10
Tuner for Vertical		(0)	1410 9	
Antennas	Alexander	101	Nov.	. 94
Award for Hams & SWLs.	Vievalidei	(0)	IAOA.	. 74
25 Major Cities		151	4	
Clipper: The Modumax	Esta a .	(F)	Jan.	6
	Friedman	(C)	May	7
Converter, 6 & 10	Green, Chas.	(C)	July	7
CPO, Buffered	Daniels	(C)	Nov.	40
CW Monitor, Wireless	Friedman	(C)	July	93
Ham Station, Lunchbox	Buckwalter	(C)	Jan.	57
Incentive Licensing is Back!	Bliss	(F)	Jan.	82
Mike Preamp, A UniFET?	Mann	(C)	Mar.	.57
Transmitters:		(-,		
Bare-Essentials				
Transmitter	White	(C)	Mar.	20
40 and 80, 20 Watts for	White	iči	Sept.	
2 Meters, 2 Tubes for	Green.	(0)	Jepi.	.44
1 10Des 101	Charles	101	Man	07
VOX, The FET		(C)		
OA, THE ILI	Powell	(C)	May	61

		91), 234	
FM Radio, Automatic Mike Preamp, A UniFET? Power Hoax, How to Cope	Green, Chas. Mann	(C)	
With the Preamp, Phono/Tape Records:	Locke Ritchie	(TP) (C)	Mar41 July38
Care, The ABCs of Record How Long Do Stereo	Angus	(TP)	Mar 82
Records Last? Speakers: Extensions Division.	Swathmore	(TP)	Sept. 70
Hi-Fi How-To Mini Mini Speaker Shoebox Speaker, A Real	Buckwalter Kolbe Capotosto	(TP) (CC) (C)	Nov70 May65 Nov29
Super Super Thin Speaker Stereo Balancer, Super Stereo Control Center,	Capotosto Glenn	(c)	Mar71 May56
Bedroom Stereo FM, Who Goofed on?	Salm Roberts	(C) (F)	
Tape Recording:  AM-FM Cartridges for Tape Players		(F)	Jan62
Bootleg Tapes, The Boom in Dust-Cover for Tape	Angus	(F)	Sept. 89
Recorder Tape Cartridge,	Capotosto	(C)	Sept. 32
Continuous Play Tapes, El Tests the	Karmin	(C)	Nov101
Popular Audio Tape Player in Your Car, How to Install a	Angus	(F)	
Tape Player to Your Phono, How to Hook a	Capotosto Davidson	(C)	Mar 49 Nov. 109
	D4-1030H	101	1101. 107

#### CITIZENS BAND

Band Scanner, CB Beam for CB, Mobile CB: A Reappraisal	Kolbe Morris Levesque	(C)	July May May	92
--	-----------------------------	-----	--------------------	----

CB License—The First Time, How to Get A! CBing Canadian Style Clipper: The Modumax Doubly-Sure Light for CB Installation Guide, Roof- to-Basement CB Jamboree Swing, Making Your CB Mike Preamp, A UniFET? Nightmare in Indiana, CB Receiver, Pocket CB State of the CB Art, The Transmitter, Junior Ham VOX. The FET Walkie-Talkie-To- Rocky Road to 50 mc,	Buckwalter Levesque Friedman Ritchie Glenn Levesque Mann Buckwalter Daniels Ritchie Powell	(F) (O) (F) (O) (F) (O) (O) (O) (O) (O) (O) (O) (O) (O) (O	Mar. Sept. May Nov. Sept. Nov. Mar. Jan. May May May	82 71 .84 99 57 46 82
Walkie-Talkies' Those Cheapie Walkie-	Long	(F)	Jan.	.102
Talkies Walkies	Garrett	(F)	Jan.	73

Guitar Amp, Junior (Heathkit J K-37) Ignition System, Capactive Discharge	Sept 93
(Knight-Kit KG-372)	Nov 51
Power Pack, Two Way (Knight-Kit KG-666)	May47
Receiver, Extended Coverage (Ameco R-5) RF Generator With Calibrated Output	Sept72
(Knight-Kit KG-686) Stereo Receiver, A First Rate	Mar 107
(Heathkit AR-15)	Sept38
Stereo FM Tuner, Budget (Eico Cortina 3200)	July44
Stereo Tuner, FET (Scott LT-1128)	Jan 84
Transceiver for Novices, A (Heathkit HW-16)	July 77

Calibrator for Your Scope's				
Sweep	Green, Clare	(C)	Nov 8	įį
Career at the Service Bench for You, A? Electrolytics: Coping With	Margolis	(F)	Jan8	37
TV's No. 2 Bad Guy, Gyp the TV Repairman,	Margolis	(TP)	Sept6	
How to Millivoltmeter, An FET	Margolis Henry	(F) (C)	July4 Sept7	11
Printed-Circuit Servicing Made Easy Servicing, How To Make	Ritchie	(TP)	Mar9	13
Money in Part-Time	O'Donnel	(F)	Nov6	. 7
Transformers, A Handy Guide to Unmarked YTVM, Pocket	Buckwalter Green, Clare	(TP) (C)	July5 July . 2	16

#### SHORT-WAVE LISTENING

				-
Antennas: Ground Plane, 6-Bit	Maziarz	101	1	101
Multi-Dipole SWL	Maziarz	(C)	Jan.	106
Antenna	Maziarz	(C)	Sept.	86
Apollo, The Latest on DXing		(F)	Jan.	104
Award for Hams & SWLs, 25 Major Cities		(F)	Jan.	43
Eavesdropping on Big		(,,	•	
	Kneitel	(F)	Jan.	90
Folk Music, DXing	Bower	(F)	Jan. July	32
Great Cities, How to	_			
Log 25	Bower	(F)	Mar.	68
Language Via Short Wave,	0 - 16 1	151		
Learn A	Cookfair		Jan.	
S-Niner, The FET	Kell	(C)	May	47
Time Standard, Portable	Green,	(0)		
	Charles	(C)	Nov.	45
2-Faced Clock, Would You				
Believe?	Lincoln	(S)		
Utilities, DXing the Sunspot	Bower	(F)	Nov.	. 32

#### SPECIAL CONSTRUCTION PROJECTS

Bug, Build Yo Flasher, Auto	ur Own	Henry Effenberger	Jan,2 Nov7	
riasner, Auto		emenberger	14047	2

## El's 1968 Index

Makel Lagran Comes		
Metal Locator, Super- Sensitive	O'Donnel	May30
Military Planes, Eavesdrop	Green, Charles	Jan41
Musical Instruments: Fuzz Box for Swingers	Friedman	July83
Glidophone, The	Maynard	Mar38
Rhythm Section You Can Build, A	Maynard	Nov57
Theremin, Wide-Range	Walker	May38
PA, Portable Spiel Stopper	Daniels Keli	Sept57 Mar44
Strobescope, Pinch-Penny	Turner	Jan70
Switch, Sonic Test Equipment:	Ritchie	Sept47
Calibrator for Your	C	NI.
Scope's Sweep Millivoltmeter, An FET	Green, Clare Henry	Nov88 Sept73
VTVM, Pocket	Green, Clare	July29
Time Standard, Portable 2-Faced Clock, Would You	Green, Charles	Nov45
Believe?	Lincoln	Nov108

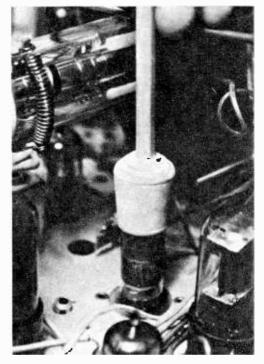
#### SPECIAL FEATURE ARTICLES

Battery, instant Bootleg Tapes, The Boom in Careers:	Angus	Sept 4 Sept 8	
Career at the Service Bench for You, A? Career in Airline	Margolis	Jan8	17
Electronics, How About a High-Flying Historical:	Surpin	July6	9
Radio 1212, The Short Treacherous Life of Sayville, The Secret of	Althouse Angus	Sept9 Nov4	
WBBH, The Station With Everything—Except a License Radio Americas, El Visits	Kneitel Kneitel	Nov8	
Telephone Answerer, Low-Cost TV-Tower Crisis, New York's	Biechman	July4 Sept9 Mar3	14
Uncle Tom's Cabin, A Peek in Voicing for Wind	Janes	Mar9	
Instruments, Electronic Walkie-Talkies, Those	Surpin	Jan3	8
Cheapie Weather Forecasting, What	Garrett	Jan7	3
Have Satellites Done For?	Locke	July10	12

#### THEORY & PRACTICE

The second secon		
Bugged Pigeon, The Case		
of the	Hill	Nov38
Diodes, What's New in?	Buckwalter	Sept29
Extensions (speaker)	B. 1 .41	
Division, Hi-Fi How-To Language via Short Wave.	Buckwalter	Nov70
Learn a	Cookfair	Jan33
Power Hoax, How to Cope	Cookian	Jan33
With the	Locke	Mar41
Printed-Cricuit Servicing		•
Made Easy	Ritchie	Mar93
Protect Electronic Gear in		
Your Car, How to Record Care, The ABCs of	Joseph	Mar82
Tapes, El Tests the Popular	Angus	Mdr02
Audio	Angus	Jan93
Tape Player in Your Car,	, gas	
How to Install a	Capotosto	Mar49
Tape Player to Your Phono.		
How to Hook a	Davidson	Nov109
Transistor Experiments, 10 Really Basic	Buckwalter	Mar62
SIA—Tiniest Antenna or	buckwaiter	Mar02
Biggest Bust	Walker	Mar59
Transformers, A Handy		
Guide to Unmarked	Buckwalter	July56

# TIPS



Off in a corner of a TV set is a tube which has to be pulled for checking. You reach in, grab it and let out a howl because it is as hot as lava. Instead of searing your fingers again, make a tube puller by attaching a rubber furniture tip to a dowel. A %-in. tip fits miniature tubes.



Storing and locating small parts when building a kit wastes valuable time. The problem can be solved by using a drawer-size cosmetics tray. Such trays have small compartments, which are ideal for hardware, small parts, resistors and capacitors as well as chassis sections and subassemblies.

## El's 1969 Index

C—Construction Project F—Feature Article TP—Theory & Practice Name following title is author. Page number follows the date.

#### AMATEUR RADIO

4.4				
Antennos:				
Beam Antenna for 10	Lumachi	(C)	Jan.	95
Meters, \$10				
Big Mam Antenna	Noll	(C)	Mar.	92
Tandem Vee-Quad				
Antenna for Hams	Lumachi	(C)	Sept.	56
Accessories, 6 Most Useful				
New Ham	Friedman	(F)		
Awards for Hams & SWLs,		(F)	Jan.	69
Outposts				
Compressor:				
Compress-O-Phone	Ritchie	(C)	Nov.	29
Crystal Checker,				-
Gnat-Size	McClellan	(C)	Nov.	101
DXpedition in Search of				
the Incas	Jordan	(F)	Mar.	95
MARS, Big Green Men from	Walker	(F)	Mar. Mar.	25
Q-Multiplier for SWLs and				
Hams, Audio	Kell	(C)	July	97
Receivers:		1		
Best of the Budget				
Receivers	Friedman	(F)	July	94
Outboard Soup-Up for				
low-cost Receivers	Green, Clare	(C)	May	A3
Robot Operator for Your		•		
Ham Shack, A	White	(C)	May	42
Wavemeter for Hams &				
CBers, \$3.13	Green, Clare	(C)	Sept.	32
		, -,	p	

#### AUDIO, STEREO & HI-FI

Compressor:				
Compress-O-Phone	Ritchie	(C)	Nov.	29
Hi-Fi and Stereo,				
An Introduction to		(F)	Jan.	57
Magnetic-Cartridge Pre-				
amp, for Better Stereo, A	Ritchie	(C)	Sept.	87
Speakers:				
Finish for a Speaker				22
Cabinet, A Fine	Capotosto	(C)	Mar.	60
For Cool Cats,		(0)		
A Speaker for	Savage	(C)	Nov.	43
Round and Round,	Milder	153		01
The Sound That Goes		121	Mar. Jan.	86
Super-Mini Speaker Stereo Conversion for	Kolbe	(0)	Jan.	/3
Mono Phonos	Daniels, Vince	101	May	51
Stereo for Cars & Boats	Ville	(0)	Mdy	3.)
Golden-Ear		(2)	July	103
Tape Recording:		(,,	July	103
Playtape, How to Hi-Fi a	Kell	(C)	Jan.	100
Tape Cassettes.	***************************************	(0)	Jan.	
Consumer Report:	Angus	(F)	Mar	73
Tape-Head Analyst	Kolbe	(C)	Mar. July	55

#### CITIZENS BAND

CB in the Air, El Tests CB Transceiver Plus YHF	Simms	(F)	Nov94 Sept. 110
Community Radio Watch Crystal Checker, Gnat-Size	Levesque McClellan	(F)	July 68
The Newest in CB	Morris		May66
Field-Strength Meter: FSM for CB, Pocket	Ritchie	(C)	Jan31

Matcher, Master Mr. Nixon, CB and	Richards	(C)	May	60
Motorbike, CB on a Preamp for CB Mikes,	Ritchie	(c)	May Mar.	69
Capsule Power Sensor for CB.	Friedman	(C)	May	63
Pin-Money Skeletons in CB's Closet	Richards	(C)	Sept.	97
The Wavemeter for Hams &	Wahls	(F)	May	68
CBers, \$3.13	Green, Clare	(C)	Sept.	32

#### KIT REPORTS

		_
Combo Amp, 90-Watt (Knight-Kit KG-387) Home Protector, Three-Armed	May	56
(Heathkit GD-77, GD-87 and GD-97)	July	52
Minikits, Making it with Walker	July	44
Preamp and Power Amp, Stereo	July	
(Dynaco PAT-4 and Stereo 120)	Jan.	74
Radio Control: R/C Kits, First	Jan.	/0
(Heathkit GD-47)	14	100
Rhythm Section, Organ	Mar.	100
(Heathkit TOA-67-1 and TOA-67-5)		
Sideman Eveniment (N-1 1 VI VO ann)	Jan.	
Sideman, Everyman's (Knight-Kit KG-392)	Nov.	74
Treasure Locator, Economy (Caringella TRL-1)	Sept.	60
Tube/Transistor Tester (EMC-215)	Sept.	45
VO Meter (Heathkit IM-17)	May	
VOM, Solid-State (Delta 3000)	Sept.	
	-cpi	

#### SERVICING

The ABCs of Color Television Servicing: Part I: Review &	Belt	(TP)	
Procedures			July43
Part II: Color Servicing Fundamentals Part III: Adjusting			Sept69
Color Sets			Nov61
Color CRT, Death of a Color TV Picture,	Margolis	(F)	Mar89
How to Get a Perfect High Z for YOMs	Margolis Green,	(F)	May45
	Charles	(C)	Mar83
Leakage Checker, Electrolytic	Kell	(c)	Mar83 Nov82
MHO Tester for FETS, A	Green,		
	Charles	(C)	July83
Oscilloscope into a Volt-	Green,		
meter, How to Turn an	Charles	(C)	Mar83 Mar72
Transistor Checker, \$1.59	Patrick	(C)	Mar72

#### SHORT-WAVE LISTENING

Awards for Hams & SWLs.				
Outposts		(F)	Jan.	69
Broadcasting, Grim Facts				
on Short-wave	Leinwoll	(F)	Sept.	92
DXing:				
New Zealand,		100	•	
DX Scene in	McKenzie	(F)	Nov.	
Outposts, DXing the	Bower	3±1	Mar.	102
Relays, DXing the	Bower	(F)	July	76
Top of the World,	0	153	1	00
DXing the Free Czech Radio	Bower	(5)	Jan.	78
20 Incredible Days of	Roberts	(5)	July	90
Q-Multiplier for SWLs and	Koperiz	(1)	July	00
Hams. Audio	Kell	(C)	July	97
Preamp for the Broadcast	Ken	(0)	July	
Band	Kell	(C)	Mar.	. 56
Receivers:		1-1		
Best of the Budget				
Receivers	Friedman	(F)	July	94
Outboard Soup-up for				
low-cost Receivers	Green, Clare	(C)	May	83
Radio Libertad-A Real				
Mystery Station		(F)	Sept.	. 50
Toughest OSLs of All	Stanbury	(F)	May	49

#### SPECIAL CONSTRUCTION PROJECTS

Burglar Alarm, Build	2.0	m - 1
Your Own Ultrasonic	Cohen	Jan85
Canned Hound Dog The	Powell	Sept43

# El's 1969 Index | new miniature

Freeze-Up Guard Greeting-Card Radio, \$1.97 Intercom, Tight-Budget Intruder Alarm, The Tipoff	Daniels, Vince Green, Charles Kell Kell	Mar. Sept. Sept. Nov.	64
Leakage Checker, Electrolytic	Kell	Nov.	82
Legal Broadcast Station, Build Your Own Resistor Rack, \$2.79 Mini Musical Instruments:	Friedman Poweil	July Sept.	
Bass, Easy-to-Build Electronic Marimba, Solid-State Tripler, Guitar	Maynard Maynard Daniels, Steve	Jan. Mar. Sept.	43
Oscilloscope into a Volt- meter, How to Turn an Stirrer, Magnetic Strobe Exposure Meter.	Green, Charles Kolbe	Mar. Mar.	
Direct-Reading Tele Remote Control Weather Receiver	Kell Daniels, Vince	May Jan.	
Low-Band		July	71

#### SPECIAL FEATURE ARTICLES

AM/FM Radios, Do		
Dollars Buy quality in?	Gregory	Sept75
Apollo, A Final Report on		July!!!
Careers:		
Air Traffic Control How		
about a Career in?	Belt	July38
Eavesdropper For the		
FCC, Be a Paid	Walker	Mar63
Military Electronics Train-		
ing, The Real True		
Facts About	Belt	Sept39
CATV, For Great New		
Career Opportunities	To the	
Think	Walker	Nov39
Historical:		
Olden, Golden Radios,		
New Fun From	Atlee	Nov56
Our Radio Pirate,	Kneitel	Mar49
1933 Vintage	Kneiter	Mar47
Skeletons in CB's Closet,	Wahls	May68
Home Video Tape Re-	wants	May00
corder, My Life & Hard		
Times with a	Freed	Nov97
Ovshinsky Affair, The	7.000	11011
Incredible	Lydon	Sept83
Radio's Crisis of Identity	Smith	May93
Surplus Market,		
A Modern Guide to the	Morris	Nov88
Tools for Electronic		
Hobbyists, Amazing New	Stella	May27

#### THEORY & PRACTICE

The ABCs of Color		
Television Servicing:	Belt	
Part 1: Review &		
Procedures		July43
Part II: Color		
Servicing Fundamentals		Sept69
Part III:		
Adjusting Color Sets		Nov61
Antenna Rotator,		
Choosing an	Simms	May100
Color CRT, Death of a	Margolis	Mar89
Color TV,	4.	
The Private War of	Simms	Jan90
Color-TV Picture,		14 45
How to get a Perfect	Margolis	May45
Color TV Tunes Itself, How	Buckwalter	Nov48
Hard Rock Make You Stone	4	Jan47
Deaf, Can?	Leslie	Jan4/
Interference,	Buckwalter	May89
131/2 Ways to Kill VTVM, Meet the	Richards	Mar38
Mini-Box Look Like a Maxi-	Richards	Mar30
Box, How to Make a	Capotosto	Mar108
Resistor With A Real Twist	Hyypia	Nov76
Scatter Communications,	пуурга	140416
They're Taking the		
Guesswork out of	Leinwoll	Sept61
ORESPHOIN ON OL	FEILIMOIL	OCP101

# new miniature electronic pliers



# a complete line of regular pliers and snips, too



XCELITE, INC.  16 Bank St., Orchard Park, N. Y. 14127  Send Catalog 162 with information on miniature and regular pliers and snips.
name
address
citystate & zip in Canada contact Charles W. Pointon, Ltd.

CIRCLE NUMBER 13 ON PAGE 15

# El's 1970 Index

C—Construction Project
F—Feature Article
TP—Theory & Practice
Name following title is author.
Page number follows the date.

#### AMATEUR RADIO

Antennas:				
4-Band Ham Antenna, Dirt Cheap 6 and 2 Meters, Pinch-	White	(C)	Jan.	43
penny Skyhook for Vertical for	Lumachi	(C)	May	67
CB+10+15+20 Yagi with Total Tuning.	Noll	(C)	Nov.	47
A Ham Awards for Hams & SWLs	Lumachi	(C)	Sept.	90
Counties BFO for any Radio	Michaels	(F) (C)	Jan. Sept.	70
Blighty, The Ham Story in Converter, Easy to Build	Margolis, Sylvia Green,		Sept.	
Ham-CB Dummy Load for Hams,	Charles	(C)	July	57
Paint-Can Ham Radio, What's Ahead	Galgano Green	(C)	Nov.	56
for SWR Meter, Dual Scale	Wayne	(F) (C)	Jan. Mar.	

#### AUDIO, STEREO & HI-FI

				_
Balancer for Stereo, Elec-				
tronic	Ritchie	(C)	Mar.	92
Broadcast Station, Mike-	Kilcine	(0)	Widi.	/2
Size	Walker	(C)	Jan.	73
Cartridge, Out-of-Sight		(F)	Jan.	96
Crystal Clarity for Stereo	Walker	15)	Mar.	DI
Four-Channel Stereo	W dikei	(-)	Mai.	DI
Pleasure Squared or				
Square Hi-Fi?	Angus	(F)	May	48
Mixer, Four-Channel, Uses		101		
Just one IC	Powell	(C)	May	27
Speakers:				
Cornered Horn for Bigger				
Bass	Kolbe	(C)	Jan.	57
Stereo Speaker System,		,,,	ouii.	
Unitized	Kolbe	(C)	Nov.	64
Square-Wave Generator	4			
for Audio Testing, Free Power	Kolbe	ICI	Nov.	70
Stereo '70	Angus	(F)		
	3	. ,	J = . ,	
Tape Recording:				
Cassette Accessories				
Buyers Guide to	Angus	(E)	Nov.	74
Cassette Recorder, Tak- ing Care of a	Davidson	(E)	Sept.	- 50
Control Your Recorder	Davidson	(-)	зерт.	58
How to	Ritchie	(F)	Nov. Jan.	84
What's Ahead for Hi-Fi	Milder	(F)	Jan	57

#### CITIZENS BAND

Antenna, Vertical for CB+10+15+20 Converter, Crystal-Con-	Noll Graf &	(C) Nov47		
trolled CB Converter, Easy to Build	Whalen	(C)	May	<b>7</b> 7
Ham-CB	Charles	(C)	July .	57

Director Finder, CB	Friedman	(C)	Sept.	47
FCC Stole CB, How the	Levesque		May	
Quad, Cheapie, for CB	Koller		Mar.	
SWR Meter, Dual-Scale	Lumachi		Mar	
Transceiver Specs, How to				
_ Read CB	Ritchie	(F)	July	93
Tune a CB Antenna Razor				
Sharp, How to	Friedman	(F)	Jan	89
What's Ahead for CB	Levesque	(F)	Jan	40

#### KIT REPORTS

Bar Generators, Four, for Color TV (Conar 680A, Eico 385, Heathkit IG-28, Knight-Kit		
KG-685) Color Organs, Cheaple Guts for (Science	Sept.	43
Workshop LO-103)	Sept.	
Color TV Kits, A New Name in (Conar Custom	Jan.	93
RDF Plus, Foghorn, etc. (Heathkit MR-18 and	Nov.	82
MD-19) Scope, A Semi-Pro (Elco 465)	Mar. July	
Tach, Thumb-Size (Heathkit GD-69) Tube Tester, Blister-Pack (Mercury 990)	Sept.	38

#### SERVICING

The ABCs of Color				
	0.11			
Part IV: Dynamic Con-	Belt	(IP)	Jan.	N.3
vergence & Chroma				
Servicing			X	
Part V: Chroma Circuits:				
Operation & Trouble- shooting				
			Mar.	41
Part VI: Aligning Color Sets				
Examination on Part VI			May	
			July	96
Cassette Recorder, Taking Care of a	Davidson	(5)	£	-
	Davidson	(F)	Sept.	58
Harmonic-Distortion Meter,	Cohen	101		45
Low Cost Horizontal Defect Detector	Conen	(C)	July	46
for TV Servicing	Coomes	101	C 4	
Micro Oscilloscope for Your	Coomes	(0)	Sept.	84
Test Bench, Build the:	Henry	101	Jan.	27
Part 1: Construction	rienty	(0)	Jan.	21
Part II: Calibration & Op-				
eration				
			May	
SCR Checker, Low Cost	McClellan	(C)		
Seventies, Service in the	Cartwright	(F)	July	38
Square-Wave Generator for				
Audio Testing, Free- Power				UL
	Kolbe	(C)	Nov.	78
Test Gear, Basic, for Color				
TV Servicing	Margolis, Art			
TV Tuning Goes Electronic	Belt	(F)	Sept.	
Voltage Tester, Glowworm	Andrew	(F)	Nov.	
Voltmeter, Diff-Amp	Cohen	(C)	Jan.	47

#### SHORT-WAVE LISTENING

Awards for Hams & SWLs, Counties BFO for Any Radio	Michaels	(F) (C)	Jan. Sept.	<b>7</b> 0
DXing:				
Counties, DXing the Indies, DXing the Longest DX, The Marine Band, DXing the	Bower Bower Bower Kneitel	(F) (F) (F)	Nov.	32
World's Waistline, DXing the Fuzz, Bugging the	Jensen Buckwalter & Kneitel		July Nov.	
Georgetown, A letter from Granny Goose, The Turn-	Kneitei	(F)	Nov.	
coat Disc Jockey Short-Wave Schedule, 24-	Angus	(F)	Jan.	
hour Sideband for SWLs SWL Antenna, Remotely	Belt	(F)	Sept. Jan.	
Tuned SWLing, What's Ahead for	Lumachi Simms	(F)	Jan.	42
	[Continued	on	page	102]



Fill in coupon for a FREE One Year Subscription to OLSON ELECTRONICS' Fantestic Value Packed
Catalog — Unheard of LOW, LOW PRICES on
Brand Name Speakers, Changers, Tubes, Tools,
Sterea Amps, Tuners, CB, and other Values. Credit pian available.

NAME. ADDRESS\_\_

CITY\_

GIVE ZIP CODE.

If you have a friend interested in electronics send his name and address for a FREE subscription also.

#### OLSON ELECTRONICS

Dept. DM, 260 S. Forge Street, Akron, Ohio 44308

CIPCLE NUMBER 9 ON PAGE 13

UNCONDITIONAL

MONEY GUARANTEE



STATE

ALL TRANSISTORIZED Unclaimed Treasures Exceed
Combined Wealth Of All Nations
Electronics Changes Luck To Science.

All models find buried coins, gold, silver, war relics and signal thru earphone with loud "beep". Features silicon planar transistors, PC boards, two separated colpitts oscillators for maximum stability, thumbwheel tuner allowing one hand operation, 5" search head for most useful range. All complete in "Unilite" black attache case with slide action locks, keys, grey foam interior cushions instrument. Included are sensitive earphone, battery, fascinating 196-page book "Lost Treasures and How to Find Them". and instructions.

FREE bibliography "Treasure Maps & Books of US."

#### MAIL THIS COUPON TODAY!

MAYERICK KIT only \$2895 complete do it yourself instrument that we guarantee to work when completed. only \$3295 CONTINENTAL

completely assembled and ready to use \$3895 IMPERIAL an advanced model that includes a powerful built

in speaker that automatically is disconnected when earphone is in use, completely assembled

TO ORDER: send cosh, check or money order. In N.J. add TREASURE HOUSE 3% Sales Tax. \$3.00 deposit for C.O.D. Dept. EGFO Tennent, N. J. 07763

CIRCLE NUMBER 24 ON PAGE 13

## El's 1970 Index

#### SPECIAL CONSTRUCTION PROJECTS

Aircraft Monitor, \$3.83 CB Converter, Crystal- Controlled Converter, Marine-Band Crap Shooter, Neon Headlight Shutoff, Auto Hornblower, Horatio's Intercom, All-Master Intrusion Detector for Back- yard Pools	Splichal Graf & Whalen Green, Charles Cohen Whalen & Graf Graf & Whalen Friedman Daniels, Steve	Sept25  May77  Mar64  Nov39  July67  Mar58  Nov27  Sept32
Musical Instruments:		
Metronome, Mini Shlock Rock Your Guitar with our Cheapie	Mangleri	Jan66
Adaptor Sideman's Sideman Neighborhood Antenna TV	Daniels, Vince Powell	May94 July74
System, How to Set Up a Radio, One-Station	Buckwalter Green, Clare	May57 July41

#### SPECIAL FEATURE ARTICLES

Boat, How to Choose Elec-		
tronic Gear for Your	Buckwalter	Mar47
Careers:		
Recording Studio, How		
about a Glamorous Job		
in a	. Belt	Sept94
Sea, Electronics At	Belt	Jan100
Servicing: Big Money in.	0411	Jan100
The Audio Scene	Belt	May 13
		May63
Eyes, Electronic	Bacon	Nov31
FCC Stole CB, How the	Levesque	May75
Magnetism Turn You On?		
Can	Hyypia	Sept39
Marine Band, DXing the	Kneitel	Mar68
Radar for Your Rowboat?,		
A	Belt	July78
Totable Stereo: Hitachi		· · · · · · · · · · · · · · · · · · ·
Stereo-FM Portable with		
Mini Look		May 47
TV Antennas, Those Special-		May47
	D'. I	1.1 00
Application	Daniels, Vince	July29

#### THEORY & PRACTICE

ABCs of ICs	Thorpe	Mar27
The ABCs of Color	_ ·	
Television Servicing:	Belt	Jan83
Part IV: Dynamic Con-		
vergence & Chroma		
Servicing		
Part V: Chroma Circuits:		
Operation & Trouble-		
shooting		h4 41
Part VI: Aligning Color		Маг41
		h4 01
Sets		May81
Examination on Part VI		July96
Amazing Gizmo Nobody		
Knows, The	Hyypia	Jan97
Bike with Real Charge		Jan65
Death Ray on Every Door-		
step?, A	Hyypia	Sept77
Long Nights of Uncle Tom,		
The	Kneitel	Nov59
Micro Technicians, The Mak-		
ing of	Hegge	Jan64
Soldering-Iron Care	Lincoln	Sept66
TV Tuning Goes Electronic	Belt	Sept72

# El's 1971 Index

C-Construction Project F-Feature Article Name following title is author Page number follows the date

#### AMATEUR RADIO

			-
Lumachi	(C)	Jan.	63
	401	11.45	7.
Lumachi	(C)	July	/4
Lumachi	(C)	Sept.	92
Kruger	(C)	May	78
	ici	Nov.	92
	(-)		
	(E)	July	78
	(,)		
	c		
Margolis, Green,			
Charles	(C)	Mar.	84
Green			
	(C)	Jan.	25
	151		
	(F)	Jan.	45
	Kruger White Green, Wayne Kolbe Margolis, Green, Charles Green,	Lumachi (C)  Lumachi (C)  Kruger (C)  White (C)  Green,  Wayne (F)  Kolbe  Margolis, Sylvia  Green,  Charles (C)  Green,  Charles (C)	Lumachi (C) July  Lumachi (C) Sept. Kruger (C) May White (C) Nov. Green, Wayne (F) July May Margolis, Sylvia Green, Charles (C) Mar. Green, Charles (C) Jan.

#### AUDIO, STEREO & HI-FI

Audio Cassettes, El Evaluates the new	Angus	(F)	Nov.	68
Audio Generators, Control Center for	Friedman	(C)	Nov.	44
Audio Servicing, Basic Equipment for	Friedman Angus	(F) (F)	Mar. Nov.	38
Four-Channel, Big Noise in Level Control & Monitor, Performer's	Ritchie	(C)	Sept.	
Meter, Direct Reading	Ritchie	(C)	Nov.	
Mr. Dolby's Wonderful System	Buckwalter	(É)		4
Rapping With Ray Dolby Stereo Amplifiers, How to	Margolis, Sylvia	(F)	May	39
Service Stereo Headphones, How	Ritchie	(F)	May	40
to Give a Space Dimension to	Kolbe	(C)	Jan.	97
Speakers:				
Slightly Stupendous Speaker System, A		(F)	Jan.	8
Speakers for All Budgets, Super-Mod	Kolbe	(C)	Nov.	4
Two Channels Into Four, Making		(F)	May	4

#### CITIZENS BAND

All-Band Whip for your				
Car, An	Lumachi	(C)	Jan.	63
CeeBeeper, The	Powell	(C)	Mar.	5
CBing the USA	Kane	(F)	May	63
CB Phone Patch	Friedman	(C)	Jan.	5
CB Repeater	Daniels	(C)	Sept.	80
CB Rigs, Quick Cure for				
Ailing	Kneitel	(F)	July	41
Code Free Hobby Band, A?	Green, Way	ne å		
Court free fromby band, At	Kenitel, To		May	7
Sideband Adaptor for CB.	•			
Build a	Daniels	(C)	Nov.	7
Monitor, Channel 9	Green, Charl	es(C)	May	6

#### KIT REPORTS

Color Organ, Four-Channel (Eico 3450)	May	85
Color TVs, Two Solid-State (Heathkit GR-370		
& GR-169)	July	67
Depthometer, Fish-Finding (Heathkit MI-29)	May	32
Metal Locator, Semi-Pro (Heathkit GD-48)	Nov.	38
Speaker System, A Slightly Stupendous (Acoustron LWE IV)	Jan.	86
Stereo Receiver, Better Than First Rate (Allied- Radio Shack RK-100 Amplifier and RK-101		
Tuner)	Sept.	64
2 Channels Into 4, Making (Eicocraft EC-4700,		
Dynaco QD-1 and Eico QA-4)	Nov.	48

#### SERVICING

Audio Servicing, Basic			
Equipment for	Friedman	(F)	Mar38
Color Picture, Getting an Unbelievably Good	Margolis, Art	(F)	Sept65
Color Picture Tube, How To Change a Picture Tube, How to		(F)	Jan36
Stretch the Life of a Signal Generator, How to	Margolis, Art	(F)	Mar65
Turn a Junked TV into a Servicing Stereo Amplifiers:	Margolis, Art	(F)	July39
Part I. Stereo Amplifiers, How to Service Part II: Preamps and	Ritchie	(F)	May46
Transistor Substitution	Ritchie	(F)	July82
TV Service Shop, On Opening your own	Margolis, Art	(F)	May81

#### SHORT-WAVE LISTENING

BCB DX, Basic Guide to Big Booster for the BCB	Levesque Friedman Margolis	(F) (C)	May57 Mar77
DX Letter from Britain	Sylvia	(F)	Mar93
DXing:			
Asian Islands, DXing the Bit of Broadcast History,	Bower	(F)	July56
DXing a	Bower	(F)	Sept56
Dual Frequency Standard for SWLs	Benrey	(C)	Sept61 July64
Fuzz Flies to UHF, The	Kneitel	(F)	July64
Radio Euzkadi Mystery— Solved!			Mar74
Tropic of Cancer Awards for SWLs and Hams	Jensen	(F)	Mar74 Jan45
Win our New DX Award, How to	Stanbury	(F)	Mar50

#### SPECIAL CONSTRUCTION PROJECTS

Antenna for Boats, Low-	Lumachi	July	74
Cost High-Performance			
Battery Tester, Universal	Benrey	Jan.	51
Color Organ, Turn On with			_
a High-Power	Benrey	July	
Inverse Burglar Alarm, An	Ritchie	Mar.	62
Organ Tones To Your Piano, Our Synovox Adds	Maynard	Jan.	74
SCA Adaptor, For Soothing Music Around the Clock,			
Build an	Green, Charles	May	27
Sound-Meter You can Build,	4.		
A Direct-Reading	Henry	Mar.	
Sub-Batt, Build a	Newmire	Sept.	51
Tightwad Tach for Tough			
Tune-Ups	Daniels	May	,90

#### SPECIAL FEATURE ARTICLES

Buyer in Electronics, On		
being a	Schell	Mar81
Circuit Nobody		
Understands, The	Keyloun	Sept29

(F) May ....48

## El's 1971 Index

Big Franchising Deal In			
Electronics Ivan the Terrible. The	Beit	Jan.	82
Strange Saga of Mr. Dolby's Wonderful	Jensen	Nov.	29
System Rapping With Ray Dolby The Video Gramophone—	Buckwalter Margolis, Sylvia	May May	41
Coming?	Buckwalter	Jan.	66

#### THEORY & PRACTICE

Freed	Jan41
Daniels Powell Lumachi Benrey	Mar42 Sept75 Mar46 Nov81
Wren	July87
	Daniels Powell Lumachi Benrey

#### **DXing Northern Neighbors**

#### Continued from page 81

listeners with local QRM on 540 kc, CKCK on 620 kc. at Regina looks promising.

When the ANIK communications satellites are launched in 1972, the Yukon will be fed Toronto and Montreal programming from a powerful earth station at Shirley Bay (near Ottawa) for retransmission to cable systems in arctic communities. For the past year, CATV systems have been rapidly multiplying in Southern Ontario and Quebec and will be hooked into the satellite.

Only one far-north community, Frobisher Bay in the Northwest Territories, has a broadcast station that has much chance of being heard in parts of North America, CFFB operates on 1200 kc and, as the sunspot count drops, chances of hearing it will improve. CFFB aired a special aftermidnight DX test in 1970 but prospects were spoiled by a harmonic of CFCF (600 kc, Montreal) appearing on the channel.

Your best bet for logging either the Northwest Territories or Yukon is via aircraft passing over them on the transpolar route. Optimum frequencies are 8910 kc and 8938 kc where you'll also find Resolute Bay Aeradio. This frigid community is also destined to have a satellite link. At this end of Ottawa's space empire, CFCF operates its well-publicized 49-meter outlet. CFCX on 6005 kc, while CBF on 690 kc, is widely received. From Toronto, CBC's English language CBL (740 kc) and French CJBC (860 kc) are also commonly heard.

### Now, Find the Circuit You Need—in Minutes!



#### **ALL NEW!**

Over 3,000 advanced electronic circuits in one master volume. Locate any application in minutes. Beats any computer retrieval system now in existence—for speed... variety and range of circuits offered.

#### JUST OFF PRESS!

#### **Electronic Circuits Manual**

by John Markus Over 950 pp., 8½"x11", \$19.75 More Than 3,000 Ulustrations

For hobbyists . . . experimenters . . . engineers . . . technicians. Includes all latest developments in solid-state components . . integrated circuitry electronic tube designs. First use pays for book many times over.

115 new operational amplifier circuits . . . 93 motor control circuits . . . 39 lamp dimmer circuits . . . 56 automotive circuits . . . 23 optoelectronic circuits . . . . 64 counter circuits—and over 2.000 more!

#### Special Features

- 99 chapters group similar circuits for easy comparison
- · Complete data on all component values
- Concise descriptions of significant circuit features, performance and operating data, and source citations
- Circuits arranged for quick, accurate evaluation of advantages and drawbacks
- Many outstanding designs from other countries

Partial Contents: Audio Control Circuits... Automotive Control & Ignition Circuits... Code Circuits... Flasher Circuits... Hobby Circuits... High-voltage Circuits... Lamp Control & Dimmer Circuits... Metal Detector Circuits... Power Supply Protection Circuits... Tachometer Circuits... Telephone Circuits... and many, many more!

#### 10-Day Free Trial-Order Today!

#### McGraw-Hill Book Company 330 W. 42nd St., N.Y., N.Y. 10036

Please send me Electronic Circuits Manual (040444-5) for 10 days on approval. At the end of that time I will remit \$19.75 plus local tax, postage, and handling or return the book and owe nothing. (This order subject to acceptance by McGraw-Hill.)

Name	
Address	
City	
State Zi	р
Offer good only in the U.S.	23.EL 172

CIRCLE NUMBER 7 ON PAGE 11

# **Electronics**

#### A Fawcett Publication

January 1972

Vol. 15 No. 1

Member Institute of High Fidelity, Inc. COVER: Ektachrome by Henry Ries Studios

ANA AMELID DADIO

#### COMING NEXT ISSUE

Lab-Grade Power Supply

Sony's Trinitron . . .

Report on Japanese Color TV

A New Type of Readout ... Liquid Crystals

Telephone Message Repeater

AMATEUR RADIO		
A 3000 Year Old Ham Shack The Ham Shack	Robert Angus Wayne Green, W2NSD/1	49 87
CITIZENS BAND		
ABCs of Single Sideband for CBers CB Corner	John T. Frye Len Buckwalter, KQA5012	58 83
AUDIO & HI-FI		
Multipath Scope for Stereo FM Cassettes Come On Strong Hi-Fi Today	John Milder	40 66 103
SHORTWAVE LISTENING		
The Listener A Trap Antenna for SWLs DXing Our Northern Neighbors	Ronald Lumachi	48 63 80
SERVICE		
Service Tips Servicing Those Solid-State TVs	Art Margolis Art Margolis	16 76
MEDICAL ELECTRONICS  Low-Cost Electronic Medical Thermometer	erWalt Henry	27
ENTERTAINMENT ELECTRONICS		
Videocassettes—Where Are We? TV's Wheel of Color Spins Again	Don Dunn Len Buckwalter	33 84
SOLID-STATE ELECTRONICS  Multi-Purpose Bench Power Supply	Joseph Ritchie	68
AUTOMOTIVE ELECTRONICS		
El Breaks the World Land Speed Record		88
EI'S WIN-THE-WORLD CONTEST	**************************************	82
NEW PRODUCTS		
Electronic Marketplace		22
HOBBY & BUSINESS OPPORTUNITIES		
Classified Ads		105
REGULAR DEPARTMENTS		
Uncle Tom's Corner  Feedback  Product Information Service  Subscription Offer  The El Ticker  El's 1971 INDEX  Over & Out		10 11 25 32 94

#### A Fawcett Publication

March 1972

Vol. 15 No. 2

Member Institute of High Fidelity, Inc. COYER: Ektachrome by Bruce Pendleton Schematic by Eugene J. Thompson

#### COMING NEXT ISSUE

Oscilloscope Calibrator

How to use Your Color Bar Generator

Special Shortwave Preselector

Four-Channel FM Broadcasting

AMATEUR RADIO	
Hi-Performance Converter for 2 MetersJim White, W5LET The Ham ShackWayne Green, W2NSD/1	76 94
CITIZENS BAND	
CB CornerLen Buckwalter, KQA5012	83
AUDIO & HI-FI	
Hi-Fi Today Robert Angus Dolby on a Chip	31 52
SHORTWAVE LISTENING	
DXing the India-Pakistan Powderkeg Alex Bower The Listener C. M. Stanbury II	32 89
SERVICE	
Service Tips	10 80
SOLID-STATE ELECTRONICS	
Lab-Grade Power Supply for Test BenchHarry Kolbe The Latest on Liquid CrystalsJorma Hyypia and Clifford L. Forbes Putting Liquid Crystals to WorkJohn P. Shields and Jorma Hyypia	23 64 68
ENTERTAINMENT ELECTRONICS	
That Yen for Japanese TV Sets Forest H. Belt How Sony's One-Gun Color TV Works Len Buckwalter	44 48
YOUR CAREER	
An Exciting Career in Aerospace Electronics?Forest H. Belt	61
ELECTRONICS IN THE HOME  Automatic Message Repeater for Your PhoneLeslie Powell Light-Sensitive Light ControllerRonald M. Benrey	40 58
KIT REPORT	
AR-3a Speaker in Kit Form	86
El's WIN-THE-WORLD CONTEST	84
	•
NEW PRODUCTS  Electronic Marketplace  Electronics in the News	13 70
YOUR LIBRARY Good Reading	88
HOBBY & BUSINESS OPPORTUNITIES Classified Ads	105
REGULAR DEPARTMENTS	
Uncle Tom's Corner Tom Kneitel, K2AES/KBG4303 Feedback Product Information Service The EI Ticker Tips	11 15 35

#### A Fawcett Publication

SPECIAL CB SECTION

May 1972

Vol. 15 No. 3

Member Institute of High Fidelity, Inc. COVER: Ektachrome courtesy of Heath Co.

#### COMING NEXT ISSUE

Channel 9 Over-Ride Monitor for CBers

Troubleshooting with a Scope

Cardio-Tach measures Your Pulse

Horizontal Antenna Array for TV

SPECIAL CB SECTION	
CB Corner: What's Ahead for CB? Len Buckwalter, KQA5012 Inline RF Wattmeter for CBers Herb Friedman, KBI9457 What's Happening with Class E for CB Len Buckwalter Dummy Load for CBers Robert F. Lewis, K7YBF	59 62
AMATEUR RADIO	
Adapting Stereo Phones for Hams Ronald M. Benrey The Ham Shack Wayne Green, W2NSD/1	80 94
AUDIO & HI-FI	
A New System for 4-Channel FM Paul Richards The Persuaders Come to Stereo Robert Angus Hi-Fi Today Robert Angus Components for Computer Hi-Fi	83
SHORTWAVE LISTENING	
DXing the New Voices of Africa Alex Bower Super Booster for SWLs Herb Friedman, W2ZLF The Listener C. M. Stanbury If	34 40 43
SERVICE	
Service Tips	8 29 66
EI'S WIN-THE-WORLD CONTEST	95
THEORY AND PRACTICE	30
How to Make Instant PC BoardsRufus Cartwright	52
A Home Calculator in Kit Form	44
YOUR CAREER The Selling Side of Electronics Forest H. Belt	77
AUTOMOTIVE ELECTRONICS  Electronics Comes to the Aid	70
KIT REPORTS	
A Pair of Four-Channel Decoders CRT Tester & Rejuvenator	50 76
NEW PRODUCTS	
Electronic Marketplace Electronics in the News	12 88
YOUR LIBRARY Good Reading	87
HOBBY & BUSINESS OPPORTUNITIES	
Classified Ads	106
REGULAR DEPARTMENTS Feedback	10
Product Information Service Uncle Tom's Corner Tom Kneitel, K2AES/KBG4303 The El Ticker Subscription Offer	10 13 14 33 98

#### A Fawcett Publication

July 1972

Vol. 15 No. 4

Member Institute of High Fidelity, Inc. COVER: Ektachrome by Mike Bonvino Illustration by Eugene J. Thompson

#### COMING NEXT ISSUE

Six Great Projects for Beginners

24-hour Shortwave Schedule

Grid-Dip Meter for VHF/UHF Hams

Guide to Basic Transistor Circuits

AMATEUR RADIO	
2 Meters-Where the Action Is!	63
The Ham Shack	94
CITIZENS BAND	
Channel 9 Override Monitor	31
CB Corner Len Buckwalter, KQA5012	35
AUDIO & HI-FI	
The Thin Look Comes to Records	42
Direct-Reading Wow & Flutter Meter, Part 1	46
Hi-Fi TodayRobert Angus	68
SHORTWAVE LISTENING	
DXing NASA and Its NeighborsAlex Bower	40
The Listener	95
SERVICE	
Service Tips	24
Troubleshooting Color TV with a Scope	50
ENTERTAINMENT ELECTRONICS	
RCA Says 'Right On' to Home Video Recording	69
THEORY AND PRACTICE	
Sidestacked TV Antennas for a Super Signal!Art Margolis	80
ELECTRONICS IN THE HOME	
Low-Cost Speed Indicator	76
Build Your Own Temperature-Humidity MeterRonald M. Benrey	86
MEDICAL ELECTRONICS	
Build a Cardio-Tach	59
EI'S NEW HI-FI CONTEST	45
KIT REPORTS  Digital Multimeter and General-Purpose VOM	84
Digital Multimeter and General-Furpose VOM	0,
NEW PRODUCTS	
Electronic Marketplace	14
Electronics in the News	70
HOBBY & BUSINESS OPPORTUNITIES	
Classified Ads	105
REGULAR DEPARTMENTS	
Uncle Tom's Corner	8
Feedback	12
Product Information Service	15
The El Ticker	58

#### A Fawcett Publication

September 1972

Vol. 15 No. 5

Member Institute of High Fidelity, Inc. COYER: Ektachrome by Henry Ries Studios Figures by Robert Laughlin

#### COMING NEXT ISSUE

Apartment Dweller's Hi-Fi

Servicing Aids for Hobbyists

Phone Patch for Hams

How to Fix Your Bum Cassettes

AMATEUR RADIO	
Flea-Power Ham Transmitter	32
E-Dipper for VHF and UHF Hams Herb Cohen The Ham Shack Wayne Green, W2NSD/1	76
The Ham ShackWayne Green, W2NSD/1	89
CITIZENS BAND	
	22
CB Converter for Your Car Herb Cohen CB Corner Len Buchweiter KOA5012	33 71
CB Corner Len Buckwalter, KQA5012 The E-Dipper: First Class E Project Herb Cohen	76
AUDIO & HI-FI	
One-Tube Phono Amplifier Len Buckwalter	31
Direct-Reading Wow & Flutter Meter, Part II	42
Hi-Fi Today Robert Angus	81
SHORTWAVE LISTENING	
One-Tube Radio for SWLs	30
A Primer For Cuba Watchers Alex Bower	40
The Listener C. M. Stanbury II Updated 24-Hour Shortwave Schedule	62
Updated 24-Hour Shortwave Schedule	66
CEDIVICE	
SERVICE Sonia Tine	20
Service Tips Art Margolis One-IC Signal Tracer Herb Friedman	26 35
Signal Injecting Pinpoints Color TV Troubles Art Margolis	58
A Lo-Lo-Ohm Ohmmeter	63
ELECTRONICS IN THE HOME	
One-IC Home Intercom Leslie Powell	34
TV Antenna System That Lasts & Lasts & Lasts	82
SOLID-STATE ELECTRONICS	
Beginner's Guide to Basic Transistor CircuitsLen Buckwalter	48
EI'S NEW HI-FI CONTEST	80
KIT REPORTS	
Home-Protection System Triggered-Sweep Oscilloscope	53 86
mggered-sweep Oschloscope	00
NEW PRODUCTS	
Electronic Marketplace	14
YOUR LIBRARY	
Good Reading	88
HOBBY & BUSINESS OPPORTUNITIES	
Classified Ads	105
REGULAR DEPARTMENTS	
Feedback	8
Uncle Tom's Corner	12
The El Ticker	85
Over & Out	94
Subscription Offer	102

#### A Fawcett Publication

November 1972

Vol. 15 No. 6

Member Institute of High Fidelity, Inc. COVER: Ektachrome by Henry Ries Studio Illustrated by Eugene J. Thompson

#### A SPECIAL ANNOUNCEMENT

Beginning with our next issue,
Electronics Illustrated will be combined
with our companion publication,
Mechanix Illustrated. See page 85
for the details.

A SPECIAL ANNOUNCEMENT	
AMATEUR RADIO	85
Simple Phone Patch for Hams Herbert S. Brier, W9EGQ What's Happening to Ham Radio Len Buckwalter, K10DH The Ham Shack Wayne Green, W2NSD/1	59 86 89
CITIZENS BAND	
Build a Modu Meter for CB Herb Friedman, KB19457 CB In a Motor Home Lou Rubsamen CB Corner Len Buckwalter, KQA5012	40 50 43
AUDIO & HI-FI	
A Really Compact StereoJim White, W5LET & Bud Weisberg, K2YOF Hi-Fi TodayRobert Angus	23 88
SHORTWAVE LISTENING	
DX Guide to Armed Forces Radio Don Jensen The Listener C. M. Stanbury II	<b>44</b> 80
SERVICE	
Service Tips	14 62 69
THEORY AND PRACTICE	
Harmonics—Good Guys in Black Hats Len Buckwalter Blasting the lonosphere for Science Stanley Leinwoll	32 81
ENTERTAINMENT ELECTRONICS	
Electronic Bongo Herb Cohen	47
SOLID-STATE ELECTRONICS  Pro Solder Center Len Buckwalter	65
Low-Cost Transistor Tester William F. Splichal, Jr.	77
El'S HI-FI CONTEST	68
KIT REPORTS	
A Lab-Grade Counter for the Hobbyist	52
NEW PRODUCTS	
Electronic Marketplace Electronic in the News	10 84
YOUR LIBRARY Good Reading	76
HOBBY & BUSINESS OPPORTUNITIES	106
REGULAR DEPARTMENTS	
Feedback Uncle Tom's Corner	8
The El Ticker	12 58
Over & Out	104