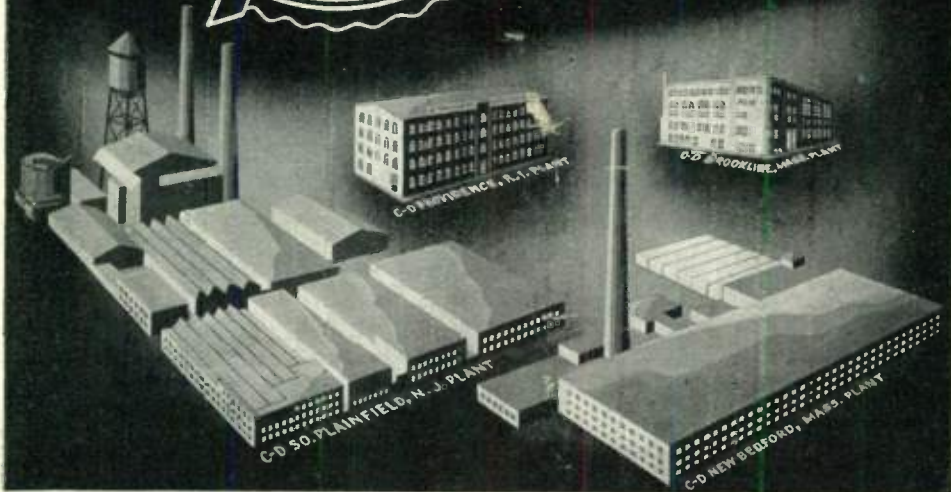


# The CORNELL-DUBILIER Capacitor



Vol. 13

MAY, 1948

No. 5

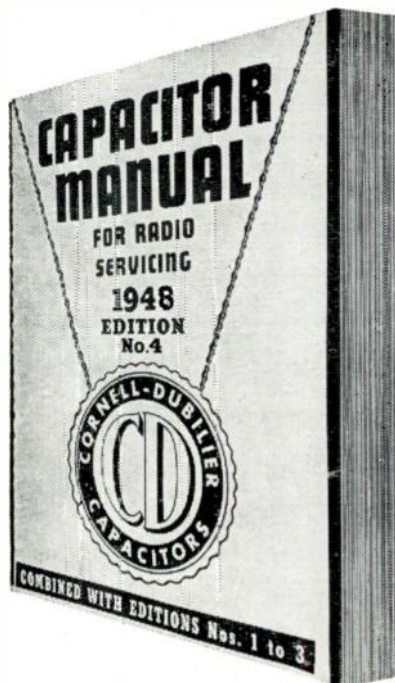
CORNELL-DUBILIER ELECTRIC CORP.  
Hamilton Boulevard, South Plainfield, N. J.

POSTMASTER: If undeliverable for any reason,  
notify stating reason, on Form 3547 postage for  
which is guaranteed.

Sec. 562, P.L.&R.  
U. S. POSTAGE  
**PAID**  
So. Plainfield, N. J.  
Permit No. 1

MR GEORGE M BEALE  
130 25TH AVE  
SAN FRANCISCO CALIF

# FASTER SERVICING BOOSTS YOUR EARNINGS WITH C-D'S NEW CAPACITOR MANUAL



Lost time on the service bench cuts into your profits. This handy C-D Capacitor Manual can save you an average of 16 minutes on every service job. Add those minutes up for a month and you will see why this book is as indispensable to you as a soldering iron.

This fourth edition of the C-D Capacitor Manual furnishes complete, up-to-date information on capacitor replacements for old and late model sets. Many thousands of servicemen have benefited from previous issues and will want to replace them with this new, revised edition.

Pages 3 and 4 show partial contents of the manual. Note how easily and quickly the required replacement capacitor for any given model may be determined. Also note that the number of standard capacitor types in the C-D line, required for proper servicing of all normal needs, has been reduced to an absolute minimum. In many instances, a combination of single section electrolytic capacitors is recommended for replacement, wherever possible, instead of multiple section units of various capacities.

## Streamlined for Speed

Stripped of all non-essentials, this manual will prove extremely valuable to the busy serviceman. By limiting the number of capacitor types required, he can thus carry a "fluid" stock that would move more rapidly and provide a more profitable turnover on his investment. Moreover, fewer capacitor types mean closer standardization, and faster deliveries to fill his stock needs.

The fact that the number of capacitor types has been "stripped for action" will in no way impair the serviceman's ability to handle any service job. Careful analysis by experts of all existing radio receiver circuits, physical structures of capacitors and set assemblies proves conclusively that service work can be handled with high efficiency by use of a reduced inventory of types as listed in this manual.

## HOW TO USE THE C-D CAPACITOR MANUAL FOR RADIO SERVICING

Manufacturer and Model No.	C-D Type Part No.	CAPACITY MFD.				D.C. W. VOLTS				By-pass Cir. No.	Filter Cir. No.	Rider's Manual Part No.	Mfg. Orig. Part No.
		C1	C2	C3	C4	C1	C2	C3	C4				
Column 1	Column 2	Column 3				Column 4				Col. 5	Col. 6	Col. 7	Column 8

FOR quick and simplified reference to the listing of capacitor replacements in this manual each of the pages is headed as shown above.

**COLUMN 1, Manufacturer and Model No.** Manufacturers are listed alphabetically with models of each manufacturer listed directly under company name.

**COLUMN 2, C-D Type—Part No.** The recommended C-D replacement capacitors are listed under this column according to standard C-D types and part numbers (Write for the latest C-D Catalog.) Standard C-D units are also shown in schematic diagrams on pages 37 to 48. All part numbers followed by an asterisk (\*) are standard C-D capacitor substitutes recommended for replacement of capacitors of unknown electrical characteristics such as those used in old models of receivers.

**COLUMN 3, CAPACITY — MFD. (Divided into sections C1, C2, C3, C4, C5).** The capacity of each capacitor section or unit is given for corresponding designations of filter circuits, the numbers of which appear under Column 5. Working voltage rating of each capacitor or section is given under corresponding designations in Column 4. Where multiple section units are used in combination bypass and filter circuits, circuit numbers of both are given in columns 5 and 6.

**COLUMN 4, D.C. W. VOLTS (Divided into sections, C1, C2, C3, C4, C5).** D.C. Working Voltage rating of

each capacitor section or unit is given for each corresponding capacity value designation under Column 3.

**COLUMN 5, Byp's Cir. No. Numbers** under this column indicate the Bypass Circuit which corresponds to that part of the circuit employed in the receiver. These circuits appear in the back section of this edition (pages 37 and 38), headed "BY-PASS CIRCUITS".

**COLUMN 6, Filter Cir. No. Numbers** under this column indicate the number of the Filter Circuit which corresponds to that part of the circuit employed in the receiver. These circuits appear in the back section of Edition No. 1 (pages 39 to 48), headed "FILTER CIRCUITS".

**COLUMN 7, Rider's Manual Vol.-P. Numbers** under this column give the Volume and Page numbers of "Rider's Manuals" which give a complete schematic circuit diagram of the receiver or power supply for reference in checking the entire receiver circuit.

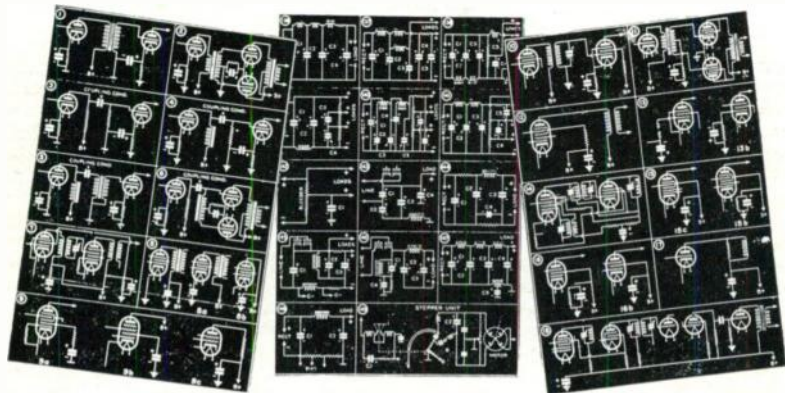
**COLUMN 8, Mfg. Orig. Part and Remarks.** Under this column manufacturers original part numbers of capacitors are given as well as any other special notes of information in abbreviated form, concerning the capacitor or circuit in which it is used.

**INDEX—Manufacturers** are all listed in alphabetical order, throughout the entire manual, and indexed with company names at the upper right or left hand corner of each page.

Page 1

## Quick Reference

This handy manual has been carefully designed to help the serviceman find the correct replacement data quickly and easily. Column 1 lists the manufacturer alphabetically and the model numbers directly under the company name. Column 2 lists standard C-D types and part numbers. Column 3 shows capacity of each section or unit. Column 4 shows D.C. Working Voltage rating. Column 5 shows corresponding By-pass Circuit. Column 6 indicates the corresponding Filter Circuit. Column 7 indicates the volume and page numbers of "Rider's Manuals" for schematic diagram reference. Column 8 lists manufacturer's original part number plus special data notes. Bold face page headings facilitate index search for individual manufacturer.



## Schematic Circuit Diagrams

These simplified diagrams are correlated with individual models listed in the tables to speed up repair inspection and capacitor replacement.



save 1,000 service hours  
with this complete, up-to-date

# c-d capacitor manual

For Radio Servicing

4th Edition by popular request!  
**OVER 400 PAGES!**

**Probet Rips—Accurate Parts Tables—Easy Circuit Diagrams**

Why hunt and peck for the right capacitor replacement? This complete manual shows you the correct unit at a glance! Simplified tables and diagrams help you service any type of old radio set faster, easier, more profitably! You can save 1,000 hours or more in service time. Call your Cornell-Dubilier Jobber now or send coupon for your copy. List price \$1.00

Cornell-Dubilier Electric Corporation, Dept. 54, South Plainfield, N. J. Other Plants at New Bedford, Worcester, and Braintree, Mass., and Providence, R. I.

**CORNELL-DUBILIER WORLD'S LARGEST MANUFACTURER OF CAPACITORS**

**FILL IN — MAIL COUPON TODAY!**

Cornell-Dubilier Electric Corp., Dept. 54  
South Plainfield, New Jersey

Please rush my copy of the new C-D Capacitor Manual to Radio Servicing. I am enclosing \$1.00 money order ( ) check ( ) stamp ( )

My Jobber is .....

Name .....

Address .....

City .....

State .....

Zip .....

1948

1948

1948



REGULAR PRICE  
**\$1.00**

**ONLY 50c**

to readers of the  
**"C-D CAPACITOR"**

**Special Offer - -  
ORDER NOW!**

**CORNELL-DUBILIER  
ELECTRIC CORPORATION**

Dept. J  
South Plainfield, New Jersey

Please rush ..... copy(ies) of the  
"C-D Capacitor Manual" at this special  
price of 50 cents each.



Enclosed: Check ( ); money order ( ); cash or stamps ( ).

My Jobber is .....

My Name is .....

My Address is .....

City ..... Zone..... State.....

**PLEASE PRINT CLEARLY**



## A Free Market-Place for Buyers, Sellers, and Swappers.

These advertisements are listed FREE of charge to C-D readers so if there is anything you would like to buy or sell, if you wish to obtain a position or if you have a position to offer to C-D readers, just send in your ad.

These columns are open only to those who have a legitimate WANTED, SELL, or SWAP proposition to offer. The Cornell-Dubilier Electric Corp. reserves the right to edit advertisements submitted, and to refuse to run any which may be considered unsuitable. We shall endeavor to restrict the ads to legitimate offers but cannot assume any responsibility for the transaction involved.

Please limit your ad to a maximum of 40 words, including name and address. Advertisements will be run as promptly as space limitations permit.

**WANTED** — Band spread coils for 10 and 20 meters for use on National SW3 receiver. State price. R. Hartman, 2401 Fourth Ave., South, St. Petersburg 7, Fla.

**SWAP** — Brandies A.C. audio amplifier complete with tubes and 10" speaker. Shipping weight, 35 lbs. Want a "Sparks" signal tracer or its equivalent. What have you? Raymond D. Lintz, 77 Hamilton Ave., Lynn, Mass.

**SELL OR TRADE** — All sizes rebuilt electric motors, radios, appliances, and machinery equipment for most every need. Bought, sold, exchanged, or repaired. Supreme Electric Company, 1335 Butter-nut St., Detroit 16, Mich.

**WANTED** — Information on where I can purchase any make of negative coefficient resistors, 1400 ohms cold; 200 ohms hot, 5 watts. George Drab, R.F.D. 1, Fort Plain, N. Y.

**SELL OR SWAP** — Model T3 Astatic Crystal microphone. Best cash offer. Satisfaction guaranteed. S. Lonigro, 52 Willowdale Ave., Montclair, N. J.

**FOR SALE** — Model B-45 signal generator, complete with batteries and instructions, like new. Price, \$15 plus postage. John's Radio Service, Route 2, Box 248, St. Joseph, Mich.

**FOR SALE** — Airlane 10 tube 62-132 chassis, good condition, without speaker, \$10; with Utah speaker, \$18. Crosley C529D 5 tube set, plays but needs minor repairs, \$9. G.E. K48 4 tube, plays but needs slight repairs, \$5. C. W. Cassel, Route 4, Irwin, Pa.

**WANTED** — Used standard model typewriter. Will trade radio tubes or a Marx electric train or pay cash. All offers answered. Jones Radio Co., Box 93, Douglassville, Pa.

**SELL OR TRADE** — Complete 30 watt sound system; type TPM-4 electric megaphone; Silver Marshall short wave converter; PE-103 dynamotor; model 1125-B Triplet volt, ohm, ma. meter; A battery or charger; carbon, crystal, and dynamic mikes. Want 16 mm. projector. John Arnold, P. O. Box 84, Bluffs, Ill.

**WANTED** — Two Green Flyer motors, two Astatic B-16 pickups, and other studio equipment. Have miscellaneous tubes, etc., for sale or trade. Eddie Howell, Gen. Del., Gastonia, N. C.

**FOR SALE** — Simpson tube tester, model 305, volt-ohm-milliammeter, model 260, and spare radio parts. All at low prices. Complete DeForest radio course, \$20. Erwin Buller, 435 North Ninth, West, Provo, Utah.

**FOR SALE** — Model 156 R.C.A. tube tester, \$17, or trade for service material. George's Radio, 724 Suburban Rd., Union, N. J.

**FOR SALE** — Superior 670 Supermeter, perfect; Superior 450 tube tester, like new; latest type tubes and condensers. Worth \$100. All for \$70, shipped Express Collect. Norman Blankenship, Granby, Mo.

**WANTED** — Junction box and connectors for same for Bendix S.C.R. 522 Transceiver. Quote price. H. H. Riley, Route 2, Aiken, S. C.

- SELL OR TRADE** — Gelto-D III 127 metal case camera, 4.5 and 3.5 Gimmel lenses. Sell for \$100, or trade for Hallcrafters SX-42. Paul Phelps, Route 3, Box 361, Louisville, Ky.
- FOR SALE** — 504-A Supreme set tester with latest roll chart, excellent condition. William Greenwood, Mechanic Falls, Maine.
- FOR SALE** — 25 phono amplifiers, left over from production, \$4 each; \$75 for the lot. Sent C.O.D. Large lot of condensers. Write for list and prices. Warren Radio, P. O. Box 208, Pequannock, N. J.
- FOR SALE** — Large quantities various types of radio tubes. Will sell or swap. Best Radio Shop, 3349 Fulton, Cleveland 9, Ohio.
- FOR SALE** — Simplex model 312 A.C.-D.C. pocket V.O.M. Excellent condition. Price, \$5. Bill DeBonis, 970 Hopkinson Ave., Brooklyn 12, N. Y.
- SELL OR TRADE** — Bound volumes 1922-1939 Q.S.T.; meters; condensers; Meissner signal shifter. Want D104 mike with power supply. V. Howerdel, 102-Hancock Ave., Jersey City, N. J.
- FOR SALE** — Hickok tube tester, model AC 51, completely modern, tests all tubes, good working order. Price, \$37.50 postpaid. Peter J. Labednick, 91½ Pine St., Nashua, N. H.
- FOR SALE** — Used radios at low prices and many other items. Write. Goldstone Radio, 1279 Sheridan Ave., Bronx 56, N. Y.
- FOR SALE** — Tubes in sealed cartons, Alnico PM speakers, volume controls, other items. Free catalog. Commercial Radio, 36 Brattle, Boston 8, Mass.
- FOR SALE** — Late model RWE-45 receiver in excellent condition. Price, \$150. Wm. F. Smith, 38 Faville Ave., Dolgeville, N. Y.
- TRADE** — Motorola auto radio in good condition, manual tuning head, minus antenna, for used tube tester in working condition. Ben Marconi, 120 Gatling Pl., Brooklyn 9, N. Y.
- FOR SALE OR TRADE** — Burgess Deluxe Vibro-Tool Kit. Want Volume I of Sam's Photofacts, or what have you? Tom Waters, 3½ Lathrop St., Carthage, N. Y.
- SELL OR TRADE** — Hickok I 177 dynamic mutual conductance tube tester, \$55. Would like F.M. tuner, Jensen coaxial speaker, or what have you? Also have small V.O.M. for \$9. Hal Goldstein, 20 Featherbed Lane, New York 52, N. Y.
- SALE AND TRADE** — Boxed tubes, all popular brands, all numbers in stock. Reduced prices. Will trade F.M. sets, resistance bridge, "Redeo" printer, and radio parts and equipment. Your list for mine. Paul Brassard, Box 353, Brunswick, Me.
- SELL OR TRADE** — N.R.I. Radio Course and radio magazines. Make offer. Can also exchange South African coins and stamps. Write. Michael McDonald, 30 Rosetta St., Regents Park, Johannesburg, South Africa.
- NOTICE** — I have full mailing equipment and lists covering U. S. and South America. Let me know your direct mail problems. Can handle any city, county, or the entire nation. G. Samkofsky, 527 Bedford Ave., Brooklyn 11, N. Y.
- FOR SALE** — Complete set of components for 10" television receiver. Made by R.C.A., all in factory cartons, less than net price. Write for details. Louis Nagy, 4258 Houghton St., Philadelphia 28, Pa.
- FOR SALE** — Jackson model 652 audio oscillator, perfect, \$100. R.C.A. Rider chanalist, model 162, \$115. B. Sadkovsky, 1730 Broderick St., San Francisco, Calif.
- FOR SALE** — Mills music machine. First class condition, three tone wood cabinet, ideal as furniture, best for record reproduction. Price, \$250 plus freight charges. Also Hickok tube tester, good condition, \$35. Radio Electric Service, Henderson, Minn.
- SELL OR TRADE** — Blue crackle finished steel horn for 12" or 14" speaker, light weight. Write for description, etc. Also have good used type 930 tubes. Joseph J. Howath, 2014 Torbenson Dr., Cleveland 12, Ohio.
- WANTED** — Radios made before 1925, in any condition. State make and price. E. Sujak, 4209 Elston Ave., Chicago 18, Ill.
- FOR SALE** — Superior model PB-200 volt-ohm-milliammeter and capacity tester. Perfect operating condition. Price, \$25. Robert W. Gorseline, 6 Ocean Green S.W., Washington 20, D. C.
- SWAP** — Have Weston analyzer and Hallcrafters Sky-Chief receiver. Want V.T.V.M., tube tester, large all-wave receiver, condition or cabinet not important. Glenn Watt, Chanute, Kans.
- WANTED** — Complete set of Riders Manuals, unabridged, through set XIV. State price and condition. Ted's Radio Service, 146-43 182 St., Jamaica 5, N. Y.
- WANTED** — Test equipment in fair condition. State makes, models, and lowest price. F. R. Wentz, Newport, Pa.

**WANTED** — Reasonably priced signal generator; vacuum tube voltmeter; auto radio 6 volt supply; signal tracer. State make, model, price, condition, and coverage of equipment you have. Frank's Radio, 2516 Emily Ave., Melvindale, Mich.

**FOR SALE** — Astatic J-30 microphone in original carton. Price, \$15. William B. Moore, Jr., Pinola Plantation, McClellanville, S. C.

**FOR SALE** — Hallicrafters S-38 receiver, perfect condition, in factory box, earphones included. Price, \$45. J. D. Bouman, 282 Robinson, Binghamton, N. Y.

**SELL OR SWAP** — Hickok 202, like new. Price, \$68, or will swap plus cash for Hickok 209. All replies answered. E. Sujak, 4209 Elston Ave., Chicago 18, Ill.

**FOR SALE** — Complete N.R.I. Course of 74 books; "Modern Radio Servicing" by Ghirardi; Audel's "Radio Man's Guide." All three in excellent condition. Make offer. A. Spector, 178 Cornell St., Roslindale 31, Mass.

**FOR SALE** — Approved model A-200 signal generator covering 100 Kc.-75 Mc. Complete, perfect, \$34. Harvey Abrahams, 195 Morris Ave., Providence 6, R. I.

**FOR SALE** — Hickok 155 Traceometer, Weston 773 tube checker, Superior 450 tube checker, all in new condition; 75 assorted speaker cones; 75 assorted auto vibrators. Make offer. Athos Longo, 279 Fellsway W., Medford, Mass.

**POSITION WANTED** — Veteran radar repairman, graduate radio technician, 1st class radio phone. Desires experience in broadcasting or servicing. Will travel. James A. Glover, 531 W. 151 St., New York, N. Y.

**FOR SALE** — Radio tubes, bulk pack, 39 cents each. Write for list. Also have good Green Flyer phono motor. Make offer. Robert L. Wenk, 2714 Valley Pike, Dayton, Ohio.

**FOR SALE** — RCA automatic record changer less radio chassis & speaker, with table cabinet, \$30. Meissner 6 tube radio kit, complete with tubes and instructions, \$21. Frank Miller, Wyalusing, Pa.

**SELL OR TRADE** — Complete N.R.I. Radio-Television and Electronic Course, all experimental data included. Complete list sent on request. Want 3 or 4 tube signal tracer in first class condition. C. B. De Munbrun, 1504 Hayes St., Muskogee, Okla.

**FOR SALE** — Guaranteed tubes at 50% off list. Write for list. Goodwin Radio Shop, Rankin, Ill.

**SELL OR TRADE** — Supreme model 589 tube tester with roll tube chart, like new. Price, \$35, or will trade for good condenser tester. Also have Robson Burgess model 100 multimeter, like new, \$12.50; overstock of 12A6 tubes at 60 each. Greggs Radio Service, 701 N. Garfield, Chanute, Kans.

**FOR SALE** — A.C.-D.C. battery portable superhet receiver complete. Needs some repair. Price, \$20. Daewin O. Taylor, 521 Wilson Ave. N. E., St. Cloud, Minn.

**FOR SALE** — Almost new N.R.I. model 66 tube checker with roll chart, \$45; C.A. 11 signal tracer, \$15; Radio City signal generator, model 705, like new, \$45. All for \$100 cash. Ralph C. Walker, Route 2, Taylorsville, N. C.

**FOR SALE** — Latest N.R.I. radio course, including all six kit manuals, in A-1 condition. Price, \$35. Ed Christner, 313 Crawford St., Middletown 19, Ohio.

**FOR SALE** — Electric irons, G.E. 575 W., \$2; Torrid 550 W., \$1. Pair RK-25 Allen Bradley 220 V. relay, type B. Make offer; curtain stretcher; stationary pins, \$3. H. Lulli, 2352-27 St., Long Island City 5, N. Y.

**WANTED** — Set of code practice tapes. Must be punched hole type for Peerless Signagraph or Instructograph. S. Abbott, 1929 Davidson Ave., Bronx 53, N. Y.

**TRADE** — Weston 3" meters, 0-25 amps A.C., and 0-100 thermo-galvanometer, for anything useful in radio servicing. The Radio Laboratory, 912 West 151st St., East Chicago, Ind.

**FOR SALE** — H-O guage Rock Island Rocket engine and 3 cars makes complete train unit. No motor, one set of tracks, \$6. Harold Davis, Route 6, Box 402, Indianapolis, Ind.

**WANTED** — Experienced radio and appliance partner, veteran preferred. Will build own shop. Must be good on installation and checking. State qualifications in first letter. Veterans Radio Repair Service, 144-18 230 Pl., Springfield Gardens, Long Island, New York 13.

**TRADE** — BC-625 complete, 1943 edition of Ghirardi's "Modern Radio Servicing" and ART-13 frequency standard (less 200 Kc. x'tal), for 2 meter or new F.M. band superhet, converter, or what have you? R. J. Foster, 48 Eliot Rd., Arlington, Mass.

**SELL OR SWAP** — Vomax 900, perfect, \$50. Feiler TS-3 signal tracer, perfect, \$30. Want Precision EV-10MCP or Riders Manuals. Milan Rafajko, 355 N. Limestone, Lexington, Ky.



**FOR SALE** — 120 bass Tell accordion, \$425; with installed mike and Flotatone amplifier complete, \$550. Johnson Radio, 302 Oakwood St., Austin, Minn.

**FOR SALE** — Prewar Filmarus enlarger, made in Germany. Complete, \$39 F.O.B. Chicago. A. Marx, 2734 Mildred, Chicago 14, Ill.

**FOR SALE** — Tubes and parts from recently closed radio service shop. Will sell as one unit or in lots. Send for list. High-Tor Radio Center, 8 First St., Haverstraw, N. Y.

**TRADE** — "Sparx" signal tracer in good condition and Riders "Servicing by Signal Tracing" for 1947 N.R.I. or other radio course. Must be complete. Gerard J. Hohman, 1938 E. Venango St., Philadelphia, Pa.

**FOR SALE** — Precision series 832S multi-range tester, \$20; Solar model CCI-60 capacitor analyzer, \$35. Both instruments guaranteed to be in A-1 condition. Leo F. Hodeck, Box 234, Braddock, Pa.

**SELL OR SWAP** — Janette converter, A-1 condition, \$30, or will trade for Riders 1-5, etc., or standard size typewriter. R. L. Patterson, 104 Carlton Ave., Brooklyn 1, N. Y.

**SELL OR TRADE** — Red Hot 5 gallon automatic electric water heater. Want Triplett or Jackson tube tester, or tubes. E. Kiehnhoff, Box 355, Wathena, Kans.

**WANTED** — Ordnance Radiography Handbook, 1946 edition. State price and condition of book. L. M. Jones, 3 Rucker St., Pomona, N. C.

**FOR SALE** — Complete set of answers for N.R.I. Course. Make offer. All offers answered. Herman Eggers, 34 Gesl St., Buffalo 14, N. Y.

**SWAP** — Class "B" model airplane engine; "Aero" coil; condenser; 4F2H Burgess boosters; model 20 Atwater Kent 2-band radio. Trade for recorder and play-back unit. Will also trade 4570 Hi powered rifle for recording gear. Marvin Hestand, 4536 Crittenden Dr., Louisville 9, Ky.

**FOR SALE** — Dumont model 164 oscilloscope; Solar model CE 160 capacitor analyzer; Readrite model 431 tube tester; Superior model 1230 signal generator; Rider volume 15. Make offer on any or all items. C. E. Brickley, Farmland, Ind.

**FOR SALE** — Simpson 215 V.O.M., \$25; Precision 856 in wood case, \$40. Both meters like new, with operating instructions. Also have 7" Hi Fidelity speaker with output trans. for 6V6, \$5. Jim Boggess, 224 W. 79th St., New York 24, N. Y.

**FOR SALE** — Transmitting condensers, C. D. type 9, 50 cents each; C. D. type 15, and Sangamo type F1, 75 cents each. R. S. Brown, 7408 Lydia, Kansas City 5, Mo.

**FOR SALE** — 288X Hickok generator; 203 Hickok vacuum tube volt-ohm-millampere meter. Both instruments practically new. Discount on each. Earnest P. Couch, Jr., 113 Kent Road, Huntsville, Ala.

**FOR SALE** — Riders Manuals 1-5 abridged, 6-14. All in new condition, complete with index books. Price, \$100, you pay postage. Leonard Barrett, 981 Smith St., Trenton 10, N. J.

**FOR SALE** — Various types of tubes in sealed cartons at 50% discount from list. Shipped C.O.D. for 25% deposit. Write for type tubes you want. Charles C. Butler, 16104 S. Main St., Gardena, Calif.

**FOR SALE** — 30 watt Deluxe amplifier mike, speaker, and automatic record changer, \$100; Tungar charger, \$7; G.E. JFM90 F.M. set, \$15. All cash F.O.B. N. Y. A. R. Dayes, 29 Charles St., Merrick, L. I., N. Y.

**FOR SALE** — 75 lone-80 CW Xmitter and 7 tube superhet receiver, spare tubes and instruction-maintenance manual, key, etc. SCR284 factory carton. \$49 F.O.B. A. F. Allen, 1342 N. Carolina Ave. N. E., Washington 2, D. C.

**POSITION WANTED** — As radio station engineer. Radiotelephone 1st class and amateur licenses; electrical engineering background, major in communications; one year research and development and about 6 years radio servicing experience. Age, 23. Excellent references from former employers. S. Hirsh, 386 Berriman St., Brooklyn, N. Y.

**FOR SALE** — Riders volume 3 in perfect condition. Price, \$6 postpaid. John W. Findarle, Route 1, Box 1061-G, Modesto, Calif.

**FOR SALE** — Philco auto radio complete with aerial, fits any car, \$13.50; Westinghouse table model radio, good condition, \$9.50; any type radio tubes 30% off list, F.O.B. Kewanee. Radio Electric Service, 111 N. Burr Blvd., Kewanee, Ill.

**FOR SALE** — R.C.A. model 170A audio chanalyst. Price, \$325. Sterling Electronic Labs, 151 East 70th St., New York 21, N. Y.

**WANTED** — Navy Ship clock, Seth Thomas, 11 or 17 jewels, sweep second hand, 8 day movement, in black plastic waterproof case. Chas. S. Brotzman, 173 Main St., Mexico, Me.

**SELL OR TRADE** — Superior PB-100 multi-meter, \$25; Gray-Lac converter with power supply; McElroy exciter, \$40; ARC4 transceiver, no power supply, \$25; BC348 with S meter, \$69. Want Hickok tube tester and any oscilloscope; also Sam's photofact manuals. P. O. Box 1298, Hollywood 28, Calif.

**FOR SALE** — Test-Rite model B-45 signal generator, in new condition, with batteries and output cabl. Price, \$20. Edwin K. Vosburgh, 1215 Maple Ave., Evanston, Ill.

**FOR SALE** — "The Cathode Ray Tube at Work," "Automatic Frequency Systems," and "Frequency Modulation" books by John F. Rider. All 3 for \$5. Want a paint sprayer in good condition. Will pay fair price. Samuel Gornick, 1150 N. LaSalle St., Chicago 10, Ill.

**FOR SALE** — Stromberg-Carlson F.M. receiver, No. 505; Weston 301 0-50 microampere meter. J. Holloway, Box 133, Haddonfield, N. J.

**WANTED** — 20 meter Xtals. Cash or trade. Have 100 ft. coaxial cable and copper tubing. Charles Holstein, 246 E. 148 St., Bronx 51, N. Y.

**FOR SALE** — Two dynamotors, both in perfect condition, \$3. Latest edition Mallory Service Encyclopedia, \$1. David Thurston, Route 1, Ashley, Ohio.

**FOR SALE** — Colt Woodsman target pistol in perfect condition, 22 caliber, 6 inch barrel, with extra clip and cleaning rod. Melvin L. Jackson, 40 Kingsbury Road, Garden City, N. Y.

**WANTED** — Zenith part no. 85-13, band switch for model 9S262 Zenith radio. Wm. E. Myers, 245 Center St., Healdsburg, Calif.

**SELL OR TRADE** — Receiver from Jap Zero; home made Bass reflex cabinet with 8" speaker. Will trade for cabinet for 3" oscilloscope, record changer, recorder, or what have you? Arnold Margolis, 1114 College Ave., Bronx 56, N. Y.

**FOR SALE** — National SW-5 receiver, full set coils, including BC band, power supply and speaker. Good operating condition, \$20. Leland Perry, 566 North 4th East, Provo, Utah.

**FOR SALE** — Weston model 674 tube checker, checks up to 25 volt tubes-RCP Multitester, model 445. Both for \$30. Thomas Neff, Samstag Ave., Ossining, N. Y.

**FOR SALE** — Hallicrafters SX24 receiver with "S" meter, xtal filter, and speaker. Just overhauled and aligned, \$50. A. C. Alatary, 8 Sylvan Ave., Metuchen, N. J.

**POSITION WANTED** — Radio engineer interested in position working with VHF equipment; 10 years experience in electronics field. College graduate, married, white, age 27. All inquiries answered. Clifford H. Harry, Box 78, Angola, Ind.

**FOR SALE** — TBY-2 28-80 mc. transmitter-receiver, complete, works fine, \$35; 5-7.3 mc. BC-458A V.F.O., \$8; aluminum tubing, for beams, lengths of 6 to 10 ft. I. Zambakian, 349 Belleville Ave., Bloomfield, N. J.

**FOR SALE** — Hickok model 540 P tube tester, new charts; Superior model 640 signal generator; tubes, 50% off list; Riders Manuals 10-11-12; Sams Photo Fact, 1-6 inclusive; assortment of technical books and small tools. Write for list and prices. Brunges Radio, Route 1, New Lothrop, Mich.

**FOR SALE** — A.C.-D.C. 4 watt portable phonograph, plays 10" and 12" records, 4 tube amplifier, jack for external speaker. Price, \$50. Pat La Martina, 8109-17 Ave., Brooklyn 14, N. Y.

**FOR SALE** — Several hundred bypass condensers, .01 mfd. to 1 mfd., 400 and 600 volt. Price, 7 cents to 20 cents each, any amount, C.O.D. Charles C. Butler, 16104 S. Main, Gardena, Calif.

**SELL OR SWAP** — Philco 088 signal generator for use with batteries. Will swap for A.C. signal generator, any make, or sell for \$15. Myron C. Jones, 924 Racine St., Racine, Wis.

**FOR SALE** — Any tube, any quantity Sylvania tubes, 25% off list, postpaid. William Bashta, Nu-Day Appliance, 704 Park Avenue, Syracuse 3, N. Y.

**FOR SALE** — 7 tube A.C.-D.C. set in walnut table cabinet with R.C.A. inter mix changer, perfect condition. Price, \$35. Leading Radio Co., 160 East 3 St., Mt. Vernon, N. Y.

**FOR SALE** — Precision 954G tube set checker; Dual Sensitivity multi range tester, like new; Precision E200 signal generator, like new; A.C. and D.C. meters in many ranges. Edward Vockeroth, 1746 N. Campbell Ave., Chicago 47, Ill.

**FOR SALE** — 25B8 substitute with instructions for slight wiring change, gives satisfactory operation, \$2 postpaid. Howard Owings, Sixth and Vine, Dayton, Ky.

**FOR SALE** — Philco model 077 signal generator, \$15; Precision 3200 signal generator, \$37.50; Hammarlund HQ129X receiver with speaker, \$137.50; Stancor P69, 60 watt Fone-CW transmitter, \$60. W2RVD, 15 Tuxedo Ave., New Hyde Park, N. Y.

**WANTED** — Retail radio and appliance sales and service shop in New York City, or good repairman with moderate means to collaborate in same. S. Hammer, 2090 Morris Ave., Bronx 53, N. Y.

**FOR SALE** — Large list of tubes in original cartons, at best offer in lots or single. Betts Radio Service, Sturgis, Ky.

**WANTED** — Vacuum tube voltmeter in good condition. Bauer Radio Repair, 8A Wavcrest Ave., Winfield Park, N. J.

**TRADE** — Miscellaneous 6.3 volt miniature tubes and other items, for meters, rack, chassis, transformers, chokes, etc. Eddie Howell, Gen. Del., Gastonia, N. C.

**FOR SALE** — Large quantity incomplete 6 tube 2 band sets, 90% wired, complete with cabinets and all necessary parts except tubes, A.C.-D.C., miniature tubes, \$6 ea.; 3 pole 3 position ceramic switches, 25 cents each. Gus Jacobson, 264 E. 165 St., Bronx 56, N. Y.

**SELL OR SWAP** — K.E. drafting set; RCA 7" television set; TBY trans-receiver; Rola 10" speakers; DBL button mike; Electrovoice model 630; receiving-television-transmitting tubes, parts, etc. Want good reflex camera, single or double lens. Jan Solomon, 891 Dawson St., Bronx 59, N. Y.

**FOR SALE** — Two Simpson model 260 volt-ohm-milliameters, good condition. Test leads included, \$32. Louis F. Rodrea, S and S Electric Radio Shop, 4759 So. Broadway, Los Angeles 37, Calif.

**WANTED** — Operating instructions for Monarch model 12 all wave signal generator, and for Triumph Multitester, model 351. Pete J. Jarvis, 4817 S. Elizabeth St., Chicago 9, Ill.

**FOR SALE** — Complete tube layout, over 100 tubes. All for \$150. Worden Radio Shop, 121 Maple St., Friend, Nebr.

**SELL OR TRADE** — Superior channel analyzer, 1945 model, good condition, with instructions. Price, \$25 C.O.D. or trade for automatic record changer unit. Charles C. Butler, 16104 S. Main., Gardena, Calif.

**FOR SALE** — Test-Rite model B-45 signal generator, complete, like new, \$28; Superior model CA-11 signal tracer, complete, \$15; Superior model 450 tube tester, \$32. Leonard W. Sidfrids, Route 7, Pontiac, Ill.

**SELL OR TRADE** — National FB7 receiver complete with four sets of bandspread coils, excellent condition. Make offer. F. L. Alexander, 330 West Tiffin St., Fostoria, Ohio.

**FOR SALE** — Meissner analyst, \$50; set of Riders Manuals, \$75; Hickok model 560 tube tester, \$50; GE V.O. meter, \$20; radio tubes, 60% off list; Simplex tube tester, \$10. Verne Wilson, Northport, Mich.

**FOR SALE** — Du Mont 274 Oscilloscope, 5" tube, original carton. Price, \$105. Steve's Radio Service, 68 School St., Chicopee, Mass.

**WANTED** — Books by Rider: "Radio Service Questions & Answers," Vol. 2; "Servicing Auto Radio Receivers"; "Vibrator Power Supplies"; "Mathematics of Radio"; "Practical Testing Systems." Paul Capito, 637 W. 21 St., Erie, Pa.

**FOR SALE** — Superior signal generator, good condition, \$28; Silvertone Radio chassis, 1933, \$5; auto radios: Belmont 680, \$8; Philco FT9, \$5; Pontiac 980455, \$5. Small oil burner, \$10. A. F. Barry, Route 4, Albion, Mich.

**SELL OR SWAP** — BC375E transmitter, complete, like new. Make offer. Want DB20 Preselector. Edwin S. Fritzing, 713 Whitehall St., Allentown, Pa.

**TRADE** — Good 9 tube 10-200 meter super, amateur station equipment, tubes, for good Speedgraphic camera. Good folding 120 camera for signal generator, tracer, V.O.M. Hard to find tubes for other tubes. Write. Wolfe Radio Shop, Amory, Miss.

**FOR SALE** — Precision 912-MCP tube checker with G-108 special adapter for Acorn tubes. Like new, \$60. James H. Moran, Box 194, Kittery, Me.

**FOR SALE** — Silver Vomax UTUM, A-1 condition. Shipped prepaid in U.S.A., \$50. Clifford O. Shaw, Route 4, Lewis-town, Ill.

**SELL OR SWAP** — Complete issues of Proceedings of IRE, 1945-1947, in excellent condition, for camera equipment, enlarger, or telephoto lens or optical parts. Samuel Doller, 1700 Crotona Park East, Bronx, N. Y.

**FOR SALE** — Zenith table model radio, A.C.-D.C. or battery; console model Apex radio; small table model radio. All in good condition. Atwater Kent table model radio, fair condition. Make offer. Bill Lutes, Stapleton, Nebr.

**FOR SALE** — Radio parts for radios dating back to 1924. Let us know what you need. W. Harold Schooley, U. S. Route 15, Allenwood, Pa.

**SWAP** — Feiler signal tracer, model TS-2, like new; Webster amplifier; juke box amplifier; power transformers, audios, chokes and output transformers, used speakers. W. R. Schalla, 1801 Illinois Ave., Lansing 6, Mich.

**FOR SALE** — Entire radio business, including all equipment, stocks, inventory, some radios and appliances. Approximate value, \$3,000 net cost. Jerry's Radio Service, Box 457, Mount Dora, Fla.

**FOR SALE** — War surplus CH tumbler switches DPDT, package of 6 for \$2; shielded mike tubular condensers, package of ten for \$1.30. R. P. Muffley, McCook, Nebraska.

**FOR SALE** — True Value Superhet, series 5Y, 5 tube auto radio, Mallory reversible vibrator, \$10; 6 volt vibrator power supply complete, 300 volt output, \$5. Jimmie Wilson, 314 East Ninth, Pittsburg, Kansas.

**FOR SALE** — Meissner 3 tube regenerative receiver, 550 Kc. to 15 Mc., complete with tubes. Otto Pollei, Jr., 2122 Edgeland Ave., Louisville, Ky.

**FOR SALE** — Hallicrafter's 15 tube receiver, SX-28. Otto Pollei, Jr., 2122 Edgeland Ave., Louisville, Ky.

**SELL OR TRADE** — 15 RCA 810 tubes at \$5 each; 5 RCA 872-A at \$3 each. Guaranteed in perfect operating condition. Would trade for condenser checker or amplifier. Don Brien, Harts-ville, S. C.

**FOR SALE** — Solar model CB capacitor analyzer, \$35; Hickok tube tester, \$50; Triplett 625-N volt ohm meter, \$40; Precision signal generator, model S-C-43, includes test leads, \$40. Will sell separately. Jerome Horacek, 2657 S. Keeler Ave., Chicago 23, Ill.

**TRADE** — RCA battery operated portable BP-10 radio, complete, and home built code practice oscillator, both in perfect condition, for signal generator or capacitor tester in good condition. William A. Fischer, 3833a Minnesota, St. Louis 18, Mo.

**SELL OR TRADE** — 1945 National Schools radio course, complete, with experimental texts and parts, if desired. Cash, or signal generator or V.T.V.M. in good condition. Write. Chas. M. Price, 4477 No. Elston Ave., Chicago 30, Ill.

**TRADE** — English radio books for any American radio magazines. Also English valves of all types for sale or trade. C. J. Moore, 22 Manchester Road, Swindon, Wiltshire, England.

**TRADE** — Vomax model 900, good condition, for good modern signal generator. Also "Modern Radio Servicing," "Elements of Radio," etc., for other good books or signal tracer. P. L. Brown, 45 Court House Place, Jersey City, N. J.

**SELL OR SWAP** — Triplett model 13520, fine working order, \$30 or swap for radio manuals by Rider or tools. Nicholas Towstega Radio Service, 322 Avenue Q. South, Saskatoon, Sask., Canada.

**FOR SALE** — Television receiver 7" trans- vision, assembled kit with cabinet. Guaranteed to work. Price, \$169. P. L. Wolins, 615 West 172 St., New York 32, N. Y.

**FOR SALE** — Janette rotary converter, like new, \$25; Vibrator Pack, 6 volt operation for 2 volt radios, \$5; Vibrator Pack, 6 volt operation for 1½ volt radios, \$3. 6 volt Genemotor for radios, \$4. George Baum, Hagerman, N. M.

**FOR SALE** — Approved Electronic Instru- ment signal generator, model A100, like new. Best offer. A Veennik, 1742 Broad- way, Brooklyn 7, N. Y.

**FOR SALE** — Radio City Products model 805B tube and set tester, \$70; Electronic Measurements "Volometer" 101B, \$10; Electronics Design Ediprobe, \$5. All practically new. Michael J. Juresic, 4013 Wilder Ave., New York 66, N. Y.

**SELL OR TRADE** — Chemicals, chemistry books, balance, glassware, totaling \$200. Also 3.5 h.p. outboard motor, car- top boat, 2.5 V. tubes. Want cash, F.M. radio, test equipment, etc. Victor Garbarini, 4045 Monticello Ave., Bronx 66, N. Y.

**FOR SALE** — 3-gang variable condensers. Amret Corporation, 277 Broadway, New York 7, N. Y.

**SWAP** — Need capacitor analyzer such as models BF-50, BN, CBB 1-60. Have 1940 15 tube all wave console radio, good shape. C. F. Albertoni, 2629 Paxton St., Akron 12, Ohio.

**WANTED** — Jumbo D.C. meter movement for construction of V.T.V.O.M. Must be 8 inch or larger. State price, condition, etc. All letters answered. Jay Dee Blevins, Rising Sun, Md.

**FOR SALE** — Eastman Vigilant 620 cam- era, leather case, 2 filters, portrait lens and holder, exposure meter. All in good condition, \$65 postpaid. M. Rug- gere, 430 Bennett St., Luzerne, Pa.

**TRADE** — Pair of Eleitz Wetzlar, German binoculars, power 7x50, good condition. Want good tube tester. Edward Crick, 6 Ash Lane, Middletown, Pa.

**WANTED** — 16 mm. sound subjects. Will buy or swap. William Roth, 824 Bergen St., Newark, N. J.

**WANTED** — H-O Gauge, railroad equip- ment. Will trade for radio equipment. G. Samkofsky, 527 Bedford Ave., Brook- lyn 11, N. Y.

**FOR SALE** — Vomax, new condition, \$50; RI generator, 30 V., 300 amp., \$35, both prepaid. Want recording equipment, car radios, cameras. Harry Kay, Route 2, Imlay City, Mich.

**WANTED** — Millen R.F. exciter with coils for 10, 20, and 75 meters; and power supply. J. Abramowitz, 118 Clara St., Brooklyn 18, N. Y.

**SWAP** — Two 5BP1 cathode ray tubes and two 24 volt dynamotors. Would like to have 16 mm. silent or sound film, or Riders Manuals 10, 11, or 12, or what have you. R. A. Underhill, 13513 Emily Ave., E. Cleveland 12, Ohio.

**POSITION WANTED** — For practical experience. Radio school graduate, nearing completion of servicing course at Melville Inst., N. Y. On the Job Training acceptable. A. R. Porzilli, 443 So. 11th St., Newark 3, N. J.

**WANTED** — Any automobile radio in playing condition, with all controls. State make, model and size. Stanley Katz, 1050 Longfellow Ave., Bronx, N. Y.

**SELL OR TRADE** — Precision series 910 dynamic electrometer. Good condition, \$35, or will trade for volt-ohm-milliamp. meter or good used typewriter. Harold W. Dalton, R.F.D. 1, Box 168-A, Blacksburg, Va.

**FOR SALE** — Instructograph, 7 rolls of double tape and Code Master oscillator with key, \$25; Ghirardi's Radio Physics Course, \$2; 12 V. 100 W. soldering iron, perfect, \$2. Harry Mohr, 196-25-89 Road, Hollis, N. Y.

**FOR SALE** — Supreme signal generator, model 576, like new, \$60; BC312 converted to 6 V. fil., less power supply and speaker, \$45. Leo Perlmutter, 2134 Vyse Ave., Bronx 60, N. Y.

**SWAP** — Westinghouse radio in large cabinet, standard and short wave reception, perfect condition. Will trade for television set or kit. Cost \$225 new. I. Leibovitz, 69 Cross St., Paterson, N. J.

**FOR SALE** — Two Sylvania 5BP1 5 inch cathode ray tubes, \$12 each. Jim Mills, 142 W. Main St., Clarksburg, W. Va.

**TRADE** — 75 watt 80 meter phone-CW transmitter less power supply, for signal generator, 3" oscilloscope, tube tester or multi-meter. W. F. Epps, Box 223, Logan, Utah.

**FOR SALE** — Workshop equipment, power tools, electric motors. Write for list and prices. Ab-Volt Electric Company, 206 Hester St., New York, N. Y.

**FOR SALE** — RCA tubes, type 1633, 35 cents each. W. Maday, 400 Ocean Ave., Jersey City, N. J.

**FOR SALE** — Abbott TR4 2 meter transmitter-receiver, good condition, tubes and power supply, stage of R.F. has been added, \$40. J. N. Crum, 1337 Summit Ave., Lakewood, Ohio.

**FOR SALE** — 35 mm. DeVry silent projector, type E, 500 watts, with extra bulb, excellent condition. Price, \$75 prepaid. Cash for 8 and 16 mm. films of all kinds. Frank H. Snyder, 2412-11th Ave., Watervliet, N. Y.

**FOR SALE** — Precision series 832-A multi-meter, test leads, manual, like new. Price, \$20. J. C. Van Arsdell, 519 W. 6th St., Erie, Pa.

**FOR SALE** — RCA model AR88 communications receiver, 14 tube. Make offer. Joseph R. Soucy, 92 Argyle Rd., E. Braintree 84, Mass.

**FOR SALE** — RCA type RI Radiola III antique radio, good tubes, set will operate. Price, \$15. Chas. H. Russell, Radio Service Co., Fayetteville, Ala.

**OPPORTUNITY** — To take over telephone exchange, and to start an electrical and radio repair shop, working with me. Prefer single person, willing to start on small scale and work up. Joe Westmann, Vichy, Mo.

**FOR SALE** — 12" Transvision De Luxe television and F.M. receiver, completely wired from kit, 12" table model cabinet. Make offer. Walter Kapinos, 304 Front St., Chicopee, Mass.

**FOR SALE** — Precision multimeter, model 856-P, like new, \$40. Riders Manual, Vol. 1, prepared exclusively for N.R.I. like new, \$10. Edward J. Hocking, 27 Sharon St., Boston 18, Mass.

**FOR SALE AND WANTED** — Abbott MRT3 Mobile 2 meter transceiver, with tubes, less power supply, \$20; "Servicing Receivers by Resistance," Rider, like new, 75 cents. Want paper cutter. R. H. Cushing, 12 Carver St., Plymouth, Mass.

**FOR SALE** — Radio City Products Co. tube tester, model 307-8, perfect condition, portable, factory modernized, tests miniature tubes, \$20. Precision V-O multi-meter, model 840P, perfect, portable, \$20. Both for \$35. Stevens Radio Shop, Raymond, N. H.

**SELL OR SWAP** — Speed Graphic, new condition, double synchronized flashgun, case and holders, \$135. Want F.M. test equipment, scopes, or what have you? M. H. Yoel, 15 Fairway Drive, White Plains, N. Y.

**FOR SALE** — Hallicrafters S-20R receiver in good condition, \$45; also complete De Forest Radio Course, 1945, and dynamotor unit for BC 375 transmitter. Best offer. Henry Survesky, 114 Walnut St., Southington, Conn.

**SELL OR SWAP** — 1210A Triplett tube tester, \$10; PB100 Superior V.O.M., \$20; Meissner 3 tube A.C. S.W. receiver, \$11; S.P. Shure phono., \$12; other items also. Write for list and prices. Need signal generator and N.R.I. Course. E. M. Campbell, 824 Short St., Litchfield, Ill.

**FOR SALE** — CREI courses, sections 2, 3, M. "Advanced Radio Engineering," "Broadcast Engineering," "Advanced Math," all for \$50. S. Fine, 247 Charles St., Providence 4, R. I.

**WANTED** — 15 watt or more amplifier, no speakers, no mike. All letters answered. Julian De Wolf, 14751 Tacoma Ave., Detroit 5, Mich.

**SELL AND WANTED** — 2 piece Telephone set, 3 to 6 volt D.C., \$20; Tweeter units, 50 cents each; dials vernier and knobs, 50 cents; condensers, radio magazines, etc. Want microammeters, 100 to 500 mics. W. F. Onder, Route 1, Box 330, Arnold, Mo.

**SELL OR TRADE** — Two signal generators, tube checker, battery radio, A.C.-D.C. radio, tubes at 60% off list. Want home recorder, or what have you? Boley's Radio Service, Winfield, Ala.

**WANTED** — Riders Manuals, 5 to 14 inclusive, or will buy single copies. State price and condition. Howard Briglow, 484 Union Ave., Brooklyn, N. Y.

**FOR SALE** — Late model 201 Crystaliner, new condition, \$50; Riders 2-6, perfect condition, \$20. S. G. Corbin, Painter, Va.

**FOR SALE** — 25L6GT, 6X5GT tubes, 40 cents each. 1947 Viewtone 7" television receiver, like new, \$150. South Side Radio, 237 S. 9th St., Lebanon, Pa.

**SELL OR SWAP** — De Forest's Training Course in radio, sound, and television. Philip White, 943 Jones Dr., Salem, Ohio.

**FOR SALE** — Meissner 12 tube, 5 band receiver, 12" and 5" speakers; Motorola 8 tube FM tuner with antenna; Electrovoice mike, Vibroplex speedbug, Brush crystal earphones. All for \$130, guaranteed. Diedricksen, 11 Vine, New Britain, Conn.

**FOR SALE** — Wilcox-Gay Recordio portable recorder, model 6A10, like new, \$180. H. Dramen, Attack Squadron One Easy, Naval Air Station, San Diego, Calif.

**SWAP** — For anything in radio or photography. Meters: G.E. 0-2 amps D.C.; Westinghouse 0-150 V.A.C.; Weston 0-1 mills. D.C.; Simpson 0-50 mills. D.C.; Westinghouse 0-300 mills.; P.R.E. Co. Ltd. 1-5 D.C. amps. Also coil resistance wire. Charles Kleinz, 1411 S. 4th St., Philadelphia 47, Pa.

**FOR SALE** — Supreme model 402 Mini-meter, \$7.50; G.E. model UM-3 VOMA, good condition, \$20; 25 watt amplifier, \$40; 4 tube Travler portable radio, like new, \$18. All for \$80. Gordon E. Wall, Jr., Rt. 1, Box 101 Mira Loma, Calif.

**SELL OR SWAP** — Wilcox receiver. Write for information. James Pietropaveo, 243 Center St., Canandaigua, N. Y.

**FOR SALE** — Gernsback's Radio Service Manuals, Vol. 1, 2, fair condition, \$2.50 each. Riders, Vol. 3, good condition, \$4.50. Hickok OS-7 A.C. all wave test oscillator, no output meter, good condition, \$7.50. All postpaid. Frank W. Brink, 2041 Rigg St., Dunmore, Pa.

**SELL OR TRADE** — 1946 N.R.I. Radio Course with V.T.V.M. and most parts, \$50, or trade for late model Precision tube checker or any late model tube and set tester. Burl B. Rowe, 1914 30th St., Parkersburg, W. Va.

**FOR SALE** — N.R.I. Course, complete, \$25; RCP electronic multimeter, \$15; Superior signal generator, \$20; Supreme tube tester, model 503, \$20; Triplett free point tester, \$10. All items in new condition. All for \$75. Harry C. Reed, 410 S. 2nd St., Steelton, Pa.

**FOR SALE** — 3000 perfect tubes. 6.3 volt to 1.17 volt, \$20 per hundred; 2.5 volt, \$10 per hundred. Various style meters for sale or trade. Nash Radio Service, 211 W. 6th, South Sioux City, Nebr.

**FOR SALE** — Complete station, like new, guaranteed perfect. Write for information. J. Cordover, 1565 Selwyn Ave., New York 57, N. Y.

**FOR SALE** — Jones cable plug and socket, heavy aluminum, 4 contacts, complete with all hardware, 30 cents postpaid. Eugene Connor, 1575 Broadway, Buffalo 12, N. Y.

**FOR SALE** — Complete 125 watt transmitter built to Thoradorson specification. Complete N.R.I. radio correspondence course and I.C.S. welding course for sale. Best offer. Nolters Radio Service, 1225 E. Mahanoy Ave., Mahanoy City, Pa.

**WANTED** — Part time work after 2 p.m. Experienced in radio and electrical appliance repairing and retailing. Student at Crescent School of Television. Michael Somma, 2746 West 16 St., Brooklyn 24, N. Y.

**WANTED** — P.A. system. Give full particulars. Also battery eliminator, 6 volt, 10 to 15 amps output, 115 volt input. Give particulars. Lucien Michand, 275 Bates St., New Bedford, Mass.

**SWAP** — Large stamp collection, for late model tube tester, or good TS3 electronic stethoscope. Make offer. Travis Heard, 893 Woddell St., Athens, Ga.

**FOR SALE** — R.C.P. multimeter, model 446P, with cover, like new, \$25; Simpson multimeter, model 260, new condition, \$35. S. Hirsh, 386 Berriman St., Brooklyn 8, N. Y.

**WANTED** — 1941 Custom Nash Motorola or Zenith auto radio in A-1 condition. State price. Ace Radio-Electric, N. Erie St., Mercer, Pa.

**WANTED** — Parts for dial gear assembly of Zenith radio, 9S367. Prefer complete assembly. State price and parts. Weeks Radio Service, 951 Los Angeles Ave., N. E., Atlanta 6, Ga.

**FOR SALE** — FM converters, Meck 3 tube model, \$15; Pilotuner 5 tube model, \$25. You pay postage. F. W. Preeshl, 404 Siebecker-Adams, Madison 6, Wis.

**SELL OR TRADE** — Radio City multimeter, model H32, like new; NRI VTVM with tube, less batteries. Need tube tester or make offer. Bill Altman, 332 East 107 St., New York 29, N. Y.

**FOR SALE & WANTED** — Triplett tube checker, model 1613, \$29. Want Riders Manuals 11 to 14 and Precision tube checker, model 912. Theodore Lohr, 140-28-247th St., Rosedale, L. I.

**WANTED** — Roll film adapter for 6x9 film back camera. Trade G.E. TC-3 tube checker, or sell same for \$40. Arnold L. Halpem, 34 Second Ave., Long Branch, N. J.

**SELL OR TRADE** — Hallicrafter Sky Ranger portable electric radio, model S-39, 1947. Price, \$75, or trade for Speco Signal Tracer and Riders Manuals or what have you, Jones H. Austen III, 4708 Evangeline, Baton Rouge, La.

**FOR SALE** — Kenyon heavy duty broadcast quality transformers; Peerless plate transformers. Prices on request. Paul Wiegert, 545 Aberdeen Ave., Dayton, Ohio.

**WANTED** — HQ-129X or NC-173. Will trade Hallicrafters 3-20R, S meter and other radio equipment, plus cash. Write. Morton Bardfield, 4 Brinsley St., Boston 21, Mass.

**TRADE** — Radio parts, etc., for typewriter, pistol, or transmitter parts. Eddie Howell, Gen. Del., Gastonia, N. C.

**SELL OR TRADE** — G.E. JFM90 tuner, converted to new band, \$30; Emerson model 538 3 way portable with batteries, \$33; Garrard RC30 mixer changer, excellent, \$40; Presto recorder, complete, \$175. J. Cooper, 445 East Grand Blvd., Detroit 7, Mich.

**FOR SALE** — D.C. to A.C. vibrator inverter, perfect, \$9 postpaid; 1946-47 Popular Science or Mechanics, Radio Craft or News, postpaid, 15 cents per copy. J. Moy, Box 169 Canal St. Sta., New York 13, N. Y.

**FOR SALE** — Howard Sams folders, 1-24 inclusive, complete and in new condition, \$30. Frank D. Hill, 316 North Weston St., Rensselaer, Ind.

**WANTED** — Hickok tube tester and signal generator; gasoline generator for American Kitchen Kook range, model 1690; good sub-flame burner, part no. G7121. John W. Reigel, Annville, Pa.

**FOR SALE** — G.E. oscilloscope CRO3A, portable and compact, like new, \$70. M. R. Wilson, 36 Race St., Belvidere, N. J.

**WANTED** — RCA 8 band 11 tube radio, model G-44. Must be in working condition. State price. Eddie Ruffie, 207 Davies St., Ludlow, Ky.

**WANTED** — To contract sub-assembly radio and electronic wiring and complete small radio assembly and alignment. State your requirements. Harold Davis, Route 6, Box 402, Indianapolis, Ind.

**FOR SALE** — Magnafash batteryless flash gun, uses No. 5 or 5M bulbs. In factory carton. Specify camera and shutter. Price, \$18.75 postpaid. R. P. Iachetta, 119 Green St., Newark, N. J.

**FOR SALE** — Over 100 radio tubes, all makes, all types at 50% off list price. All tubes guaranteed, not in cartons. Complete list on request. Murray J. Pett, 609 E. 170th St., Bronx 56, N. Y.

**FOR SALE** — 250 3 tube phono amplifiers, with tone and volume control, tested and guaranteed. Best offer for lot. Philco signal generator, used, perfect, \$25. Mrs. Tele. Co., 99 Featherbed Lane, Bronx, N. Y.

**FOR SALE** — Presto model 160-A automatic equalizer, complete, perfect condition, \$100. M. E. Boyd, 903 Salmon Drive, Dallas 8, Tex.

**FOR SALE** — Communications receiver, Breting "12", 12 tubes, excellent condition. Best offer. R. F. Chambers, 8712 E. Flower, Bellflower, Calif.

**TRADE** — 16 mm. projector, 8 mm camera, Chronograph wrist watch, 4 zircon rings, 2 60 power telescopes, 8 x 30 prism binoculars. Value of all over \$400. Want good "HRO" or "Super-Pro." good communications receiver. Fred Simonian, 85 Shepard St., Lynn, Mass.

**FOR SALE** — RCA 170A audio chanalyst, new condition, \$300. Sterling Electronic Labs, 151 E. 70 St., New York 21, N. Y.



"plug"  
a

from our good friend,  
the C-D serviceman...

CLARENCE E. BOWER of Tampa, Florida

casts us a line about his service experiences

Clarence writes:



*"I have been an ardent admirer of Cornell-Dubilier since I first came across them many years ago... in the radio game since 1909... your condensers have always given me a feeling of security and satisfaction. Your Micacs in the high voltages are really 'the stuff' and have always been my first choice."*

C-D says:

Many thanks for the compliment, Clarence. We feel mighty proud of the dependable performance that C-D capacitors have given servicemen for many years.



C-D "Silver-Mike" type 1R, silvered mica capacitor—typical of C-D's line of long lasting capacitors.

it's easy to see —  
experts prefer C-D



MICA • DYKANOL • PAPER • ELECTROLYTIC

**CORNELL-DUBILIER**  
WORLD'S LARGEST MANUFACTURER OF  
**CAPACITORS**

Consult your local Classified Telephone Directory for your nearest authorized C-D distributor.