# ARROW SALES Chicago, INC.

ELECTRONIC DISTRIBUTORS

CATALOG

WIDE-BAND OSCILLOSCOPE

OS4A/AP - \$95.00

# **ELECTRONIC EQUIPMENT**

MODEL TS-268/U CRYSTAL RECTIFIER TEST SET

A combination olumneter-ammeter designed to measure the electri-cal characteristics of microwave crystal rectifiers such as IN21 IN23 and many others. The instrument is completely self contained and requires only a single 12-wolt cell for operation. Complete with handbook. New \$14.95

Used \$6.95



A.C. **GEAR** 

**MOTORS** 

BARCOL Speed Reducer Barber Coleman PYAZ926F2 115V 60Cy. 48 Watts 60 to 1 gear ratio 60 RPM



JENNINGS UCS VACUUM **VARIABLE CAPACITOR** 



\$37.50

Jennings type UCS 10 to 300 uuf 7.5KV

Jennings Type UCS \$22.50 5 to 200 mmfd 15KV

Jennings Type USL \$22.50 5 to 500 mmfd 5KV ANTENNA TUNER

This unit contains the Jennings UCS 300 uuf. vacuum variable above plus a host of other parts including 2 motors 9 tubes, 10 relays. fan. rotary inductor, stepping switch, etc etc. All for only 10.00 more than the cost of the vacuum variable or --- \$47.50

BEAM filter.

Highly selective CW audio filter with 6 Highly selective CW audio filter with 6 tuned circuits to peak a signal at 1020 cycles or reject it. The easiest "Q-5'er" to install—put filter phone plug into receiver phone jack and headphone plug into filter jack. Filter selector switch on "Both" cuts out both filters; "Phone" nulls out hetrodynes; "Range" peaks single-signal at 1020 cycles with 100 cycles bandpass and 1 kc at 60DB down. Use the Receiver and I kc at 60DB down. Use the Receiver

BFO control for vernier tuning. Made by UTC for the Navy, \$2.95



HARTLEY 217 #5 db 20 TO 20,000 CYCLES!

**POTENTIOMETERS** 

GENERAL RADIO

PRECISION LABORATORY POTENTIOMETERS

.50

GR #	type	214A 214A	10 008	ohms	\$ .95 \$ .95
14.		471A	10000	H	1.75
10	já:	471A	50000	991	1.75
GR	726P1	- 10:1	Multip	lier	1.50

Large General Radio skirted pointer knobs

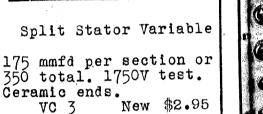
300.000

10 TURN

Ohms

2.95

**NEW ADDRESS** ARROW SALES - CHICAGO INC. 7049 W. ARCHER AVE. CHICAGO, ILL. 60638 PHONE: 586-7441



New \$2.95

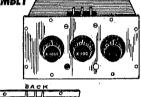






3 Pound inches only \$4.95





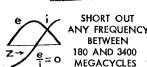


With Dials for Units, 100's and 1,000's. Unit is designated as 'BR-711637 Voltage Divider. 5-1/4" x 10" x 5-1/2" overall. Wt. 4 lbs,

**SURPLUS** 



Type 13669-1-A by Eclipse-Pioneer. Autosyn instrument field test set in metal carrying case 5" x 6" x 10" Complete with all necessary cables for plugging in various instruments. Like New. Shpg wt 12 lbs. Cat. No. 3561PM51.... \$1495



Wave Trap F-27/UPR tunes to 1/2 wave for f's of 180 to 3400 mc. Distinauish between actual signal and spurious responses or harmonics. Has coax switch to bypass it electrically without disconnecting it. Calibrated in mc. with coax cable and two UG-21/U connectors to mate with plugs on the trap. New. Shop wt 7 lbs. Cat. 2506TJ7.....\$1295

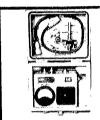


TUNE IN ANY FREQUENCY BETWEEN 200 AND 2000+ **MEGACYCLES** 

Tuning Stub TN-87/AP tunes to 1/4 wave for f's of 200 to beyond 2000 mc. Calibrated. With instructions. Furnishes do path without loading rf. Is also excellent line matcher to reduce SWR. Connectors are UG-21/U and UG-23/U. New. Shpg wt 3 lbs. Cat. 1006TJ4. Only......\$595 wt 3 lbs.

TS-II7 Wavemeter Freq. Range: 2400 to 3400MC. Pulse: CW. Power Range: 1000 uw. Sensitivity: 500 uw. Accuracy: 0.1%.

Good Condition . \$17.50



Exc \$59.50

TS-61/AP ECHO BOX. Designed for a rapid check of overall performance of

various "S" Band radar systems. The echo box may be used to:

2. Give indication of signal-to-raise ration in the receiver.

1. Determine relative power output and frequency of transmitter.

#### I-96-A COMPLETE VHF SIGNAL GENERATOR.

Frequency range 100-156. Master oscillator tunable or crystal controlled. Jnit can be operated from 110 V 60 cps, or from complete with AC power supply

#### GENERAL PARIO

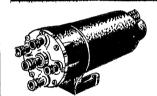
760A.	Sound Analyzer \$	75.00
7230	Vacuum Tube	
	Tuning Fork	15.00
1551A	Sound Level Meter	50.00
1500A	Counting Rate Meter	20.00
107M	Variable Inductor	20.00

3. Detect double moding.

### COLLINS

	_		
	147-A-1	P.T.O.	\$35.00
	1776-9	Control	65.00
	426C-1	Power Supply	50.00
	414-P5	Power Supply	30.00
ŀ	44A2 (350-611)	Freq. Meter Amplifier	55.00
	561A-1	Course Line Computer	35.00
	50B-1	Exciter	30.00
ľ	374C-1	Receiver Transmitter	295.00
l	424B-1	Coupler & Power Supply	75.00
ı	54 <b>J-</b> 2	Monitor	95.00
ŀ	471-B	Magnetostriction Resonator	30.00
ı	566-2820-005	Sub Assembly	75.00
l	505-0317-006	I.F. Audio Amplifier	25.00
ı	505-4074-006	Spectrum Amplifier	25.00

#### CONSTANT IMPEDANCE R F COAXIAL SWITCH



TRANSCO Type D1460-4. Designed for use in R.F. circuits where constant impedance characteristics must be maintained and rapid remote control is desired. Usable up to 11,000 MC. SP4T. Type "N" connectors. 28 v dc. 3" max. Dia, 7 1/2" overall length.

Set of 5 \$/795 Used "N" Connectors...\$2.00

430-A Microwave power meter 415-A Standing wave indicator

7.50

HEWLETT-PACKARD

	<sup>25</sup> 25	mmfd " "	- 10KV 10 " 5 "	\$2.50 2.95 1.75
N	50	tt	•	2.25
	100	11	10 "	3.50
	2.000	1,5	3 11	7.50

FIXED VACUUM CAPACITORS

Silicon Tube Replacement Rectifiers

\$3.95

Sarkes Tarzian S-5019 2800 PIV 500 MA New \$6.95 544 replacement

5U4 replacement Also 5AS4. %5AU4. 5AV4 



LM 125-20,000 KC FREQUENCY METER



NAVY LM frequency meter complete with original calibration book.
Very good cond. \$49.50

Some arrived without the calibration book but are otherwise complete and are offered in very good condition at ----\$24.50

LM power supply-----Original Navy equipment.
Excellent cond. -- \$24.50

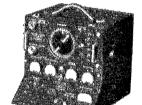
Complete Sets in New Condition Available. Please Inquire

#### SLOTTED LINE TEST SET



TS-56A/AP.

# RADIO COMPASS TESTER



Test Set I-100-A for checking looporienting circuits of Radio Compass Units BC-433-G and R-5/ARN -7 and the loop motor, autosyn, compensator and indicators of Radio Compasses SCR-269-G and AN/ARN-7. Tests components by substitution of various parts and by measuring voltage and current of components under test in actual operation. Self-contain ed, portable, rupid and dependable. Excellent Condition. \$8950

Cat. No. PM53....

Ceramic coil forms slug tuned 39dea.

### INDICATORS



ID-304/APA (Weston 888) Cross Pointer Indicator. New..... \$4.95



ID-91/ARN. 3" Compass indicator for ARN-6.

ELECTRIC COMPASS

nesyn system \$6.95

C-4/ARN-7 CONTROL BOX

C-4 CONTROL BOX for ADF/ARN-7.

Complete with tuning meter, knobs and

**GYROS** 

only . \$ 995

RATE GYROS

T1901-1A-A

(CN-149/APS45)

Exc. \$:10.00

KEARFOTT

lamps. Shpg wt 10 lbs.

NEW CONDITION

SUMMERS GVRO 351/

Same as used with Mag-

# H-46/UR

## Boom-Mike-Assembly



H-46/UR Complete microphone-headset assembly for commercial & mili-

New \$14.95

T74/ORT3A Dual Freq

AN/CRT-3

RESCUE TRANSMITTED

500 KC & 8364 KC.

Transmitter & Bag in excellent condition. Only \$37.50

#### COMPASS

Model B-16 -- Liquid floated magnetic compass fits standard 31 inch panel hole and is ldeally suited for aircraft - boats or land vehicles.



Glide Slope

TS 170/ARN

Guaranteed \$14.95

#### AN/APR-4Y



R 444/APR 4-Y Late model FM & AM receiver

Exc. cond. \$79.50

Tuners:

CV 253/ALR 38 to 1000 MC \$175.00

TN-1 -- 38 to 95 MC 29.50 TN-2 -- 74 to 320 MC 49.50 TN-3 -- 300 to 1000 MC 39.50 TN-4 -- 1000 to 2000 MC 39.50

### TEST OSCILLATOR FOR PRE-FLIGHT CHECKING OF

TEST OSCILLATOR TS-170/ARN-5

New. 2500

AIRPAX A-589

### 6V-400 Cycle CHOPPERS



New \$3.30



Originally used with the

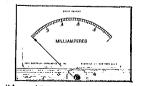
H-65/APN-9 Loran receiver-indicator

Like new yellow tagged unused since overhaul. \$74.50

# 

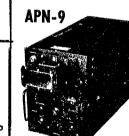
.19 .24 .39 .69 IN21A IN23A IN23B IN21B IN210 IN230 ĭn78 \$1.50

#### Wide View 100 ma



Directly calibrated 100 ma (1 ma is pictured) all clear plastic front 34" by 6" and only 14" deep. New \$6.95

LORAN



glide path receiver, this little gem can be used to directly power many other 24V equipments right from the 12 V source on lighter

> New \$37.50 Used 25.00

tary aircraft. Low impedance (600 ohm) phones and carbon

### RS38A HAND MICROPHONE

RS-38-A Carbob aircraft mike complete with retractable coiled cord with stan-dard PL-68 plug.

Metal hanger for above-

### T-17-D

T-17-D Aircraft mike complete with cord with PL-68.

New \$8.95

1-82



I-82 AZIMUTH COMPASS INDICATOR.

New \$1100 Used \$ 50

I-81 AZIMUTH COMPASS INDICATOR. New 600 Used 300

### MILITARY TYPE LOUD SPEAKERS



LS-166/U LOUDSPEAKER

A 4" diameter PM Water Proof Loud Speaker a 8 OHM Voice Coil; housed in a cast aluminum case complete with a 8 OHM to 600 OHM Transformer, and a five foot connecting cable with U-77/U Connector. This unit is used with all GRC & PRC Radio Sets. LS-166/U

4 volts in - 2 8 out

DY20/ARM

Converts 14 volts 5.5 A to

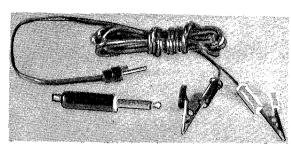


planes

\$.10.00

cm<sup>2</sup>/sec. Switch Only Pickoff: Motor Power: 115V, 400 cy., 3Ø

2½ cps. 23,500 RPM 1,3 x 106 gm-



#### MULTI-PURPOSE PATCH CORD

A most convenient item for anyone doing tape recording work. Use it to take the sound from a speaker to feed the tape machine, to connect a RCA phono plug to regular mike output, etc. Plastic covered cord 6' long with insulated black and red alligator clips at one end and standard phono plug plus adaptor to standard RCA plug at other end. Shpg wt 2 lbs. Cat. No. 260CC110

### CIRCUIT BREAKERS

pulled out manually as an add-ed safety factor. Klixon, Mech-

PSM 10 A

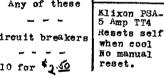
29 4 ea. Any 10 for \$2.50

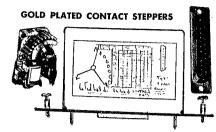


Buttons pop out with overload and show red sides; can be also Toggle type; an add- 5A AN3160 anical Prod. etc

Any of these AN3161P

Resets self when cool No manual reset.





#### Western Electric #9981908

Telephone rotary switch: 8 level 12 points each (one zero pos.) Gold plated wiper and contacts DP interupter each pulse DPDT interupter each eleventh pulse by

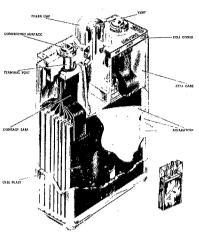
Coil 24 to 36 VDC Complete wiring diagram on each cover.

Fully enclosed in 23" x 33" x 5" metal screw down cover. Base is 22" x 61" with captive screws for fastening to chassis or panel and has three Cannon connectors pictured above. Each connector measures 3," x 21," and has 37 New \$ 7.50

#### 2-METER OR 220 mc OSCILLATOR ASSEMBLY

Lucite panel features ceramic socket for a no. 957 acorn tube, two filament chokes, 10uuf variable condenser, and 500 uuf across filament terminals. You connect the variable to plate and grid terminals You connect the variable to plate and grid terminals and tune with two parallel pleces of bus a few inches long from plate and grid, with RF short (.002uf) at far end. This will give you 120-140 mc, depending on the length of your bus wires. The assembly is P/o sig. Gen I-196-B. NEW Shpg wt, 1 lb. 39 tea 5 for \$100





Considered a life time battery, they may be recharged indefinitely and may be left charged or discharged with no ill effects. Rate of discharge is many times the rated AH and is almost flat at the rated AH. Four sizes listed below are in good supply at present. Other sizes are on hand in lesser quantity and your inquiry is invited. They are either new as indicated or in excellent gaurteed condition. All are 1.2V

BB-403 4 amp hour New boxed nylon with vent cap \$1.95 Used

BB-423 7.5 amp hour Used



Primarily designed for recording the frequency and time of received signals when connected to a receiver. It can however, be adapted to numerous other uses. Power required: 115 V ac 60 cycles. In excellent condition with all tubes - less recording paper. Shpg wt. 50 lbs. \$27.50

SINUSOIDAL WOBBULATOR

#### RD7/APA 23 RECORDER



MX-215/APG. Uses a series-wound 28y motor and a No. 2 blower made by L-R Mfg. Co. (Torrington, Conn.) and includes a radio noise filter. It moves approx. 20 cubic ft/minute at 28v, but it BLOWS LIKE ALL HADES on 115 v, 60 cy intermittent duty. We have used it for years around the house to blow out heavy dirt. 7500 RPM at 28y, continuous duty, so you can imagine how fast it turns at 115 volts; but it is dynamically balanced so perfectly that you don't get a vibratory therapy treatment when you hold it. Brand new, made to strict Air Force specs. 5 lb shpg. 5495 Cat. 506MO12. A real buy at.

# New \$14.95

SLOWER WORKS ON 12 TO 115

4 in 1

FOUR IN ONE

SARRE SAW



#### CONVERTÉR

THE HEART OF S-BAND

RT-39/APG-5 cavity assembly incl-

udes the Transmit-Receive automatic

switch cavity, the transmitter-oscil-

lator cavity, and the receiver's local-

oscillator cavity, plus the receptacle

for the crystal mixer. All brand new,

silver plated and with sleeve adapt-

ers for the two lighthouses. Tuneable

Antenna connects to right-angle, rig-

2400 to 3000 mc. Output is 30 mc.

id coax fitting which conducts one

branch to the TR cavity for holding

a 1B27 tube, and the other to the tr

ansmitter oscillator cavity for hold-

ing a 464-A or 2 C43. From the TR

cavity the center conductor is cap-

acity coupled to the output of the

receiver local-oscillator cavity for

holding a 446-B or 2C40, and cont

inues straight up to form a socket for

the 1N21B crystal mixer. Both the

tuneable. Brand new less tubes and

crystal. Shpg wt 6 lbs. \$395 Cat. No. 506TXR5....

2C40 and the 2C43 are manually



TN-IB/APR-I receives and converts 38-80 MC RF to 30 MC IF. Requires 250 V B+, 6.3 VAC. New condition. Shoa wt 35 lbs. \$ 24 50 Cat. No. 3561CV1.....

Used \$12.50

### TELEPHONE DIAL

or light intensity of 20 foot-candles. and max. external circuit resistance of 200 Ohms, Produces 4.0 uA (+.3) per ft. candle with a linearity factor of .83

(+.08). Linearity is nearly 1.00 into a

MODEL 594-YR Matched Pair. \$4.95

3 Ohm load.

WESTON "PHOTRONIC"

CELLS

Each .....\$2.50



Standard West. Elect. Metropolitan (letters & numbers) telephone dial. Example of operation: Pull down on the 9 hole and let go; a switch opens and closes 9 times. Good used. Shpg wt 1 lb. Cat. 206TD1....

SWITCHES Model Railroader's Favorites:

Double-Pole, - Double-Throw, Center-Off, one-hole mount, toggle switch. Toggle stays at any of the 3 positions. New. Cat. 1808X3. Only

Get four cheaper. Order Cat. 3068X3X4. Four for 295

#### 3-Hole Mounting Toggles

Single-Pole, — Double-Throw, Center-Off, spring loaded. Returns to center Off position when you take your finger off the toggle. A natural for motorreversing jobs. Cat, 1508X8, Only ...... 499

Single-Pole, - Single-Throw, Momentary. Spring-loaded, returns to Off when you take your finger off the toggle. Cat. 1308X4, Only ......

Single-Pole, Single-Throw, fixed in either position. Cat. 1130SX5. Only ....

Single-Pole, Double-Throw, fixed In either of the 2 positions. Cat. 140SX6. Only ...... 39

CHASSIS KIT

11 piece chassis punch set of carefully machined top-grade steel. Consists of five of the most popular size punches: 1/2", 5/8", 3/4", 1" and 1 1/8"; complete with gripper and accessories. Contained in a tough plastic carrying case with zipper and handle. NO. CP-110

SLIM-JIM DYNAMIC MIKE

Response 90-10, 000cy. Drawn brass

case, baked black, chromed grille;

slides into felt-lined chrome tilt-

ing - swivel friction clamp, Clamp

screws into heavy black cast base

with standard 5/8"-27 thread, Slips

out of the clamp to hold in your

hand. Has handy On-Off snap-slide

switch. Comes with mating plug.

Output: - 78 db. High impedance,

Shpg wt 4 lbs. Cat. 1906MC3. Only....\$825

TS-69A/AP 400 to 1000 MC Test Set \$39.50

#### DIRECTIONAL COUPLER



or similar. \$ 7.95



high stability permability tuned oscillator using a 1625 tube. Covers 200 to 1500KC in 6 bands with a 20 turn dial (100 increments per turn) and turn counting dial. Unit measures 61/4" H x 3" W X 9-5/8" L.

COLLINS P.T.O.

LOW FREQUENCY

OSCILLATOR - A

Shipping weight 7 lbs. Excellent Cond. \$8.95 Same as above, except tunes 200 to 600KC in 

Shpg wt 20 lbs.

Cat. No. 5061RE50...

Micro-match



#### SALTSHAKER DYNAMIC MIKE

Response 80-10, 500cy. In step with the trend toward miniaturization. A delight to see and to use. Chrome grille, stand, and hardware; permobaked enamel body. Tilts and turns. Easily removed from the base to hold snugly in your hand. Only 4" long. With 6' long highly flexible coax cord. Output: - 80 db. High impedance. Shpg wt 3 lbs.

Cat. 961MC17. Unequalled value at only \$3.95

### HIGH-STYLE DYNAMIC MIKE

Flat 60 to 12,000 cy. 50,000 ohms impedance. Sensitivity -52 db. The streamlined "Cobra" design and satin chrome finish make it ideal for night clubs and PA work as well as for the home. The swivel mount is threaded for standard 5/8"-27 mike stands; has handy on-off switch. It comes individually boxed, complete with cable and standard mike con-

nector. Shpg wt 3 lbs. Cat. 2606MC23. Only. \$9.95





W.E. #D-150734, the PHASE SHIFT capacitor in various radar range units and calibrators, has a long 1/4 " VDC power supply. Controls 5 diffshaft in Oilite bearings. Capacity erent servo circuits with 5 tone freq. varies from 0.75 to 2.75 pf between Each circuit has its own L-C tank and a sealed micro-relay. Uses the 4 plate segments and a 5th terminal to a whole plate. Segments may be following tone frequencies: 300cps for "right" servo, 650 for "left, 955 paralleled. In a sealed brass shield. for parachute, 1390 for "up" servo, New Less motor. A serialized pre-300 cps for "down" servo. Fully encision laboratory device at a great closed in a removeable cover. Like bargain. Shpg wt 2 lbs. \$ 9 95 new cond. Complete with tubes, re-Cat. 1006CR27. Only. lays and 28VDC vibrator power supply

MULTI-CHANNEL RADIO CONTROL FOR MODEL PLANES, CARS, BOATS, GARAGE DOORS, GATES LAWN MOWERS, SELECTIVE CALLING

SET OF 5 TONE FILTERS. Removed from Air-Force Target Drone Receiver and furnished with circuit showing use in modern Air-Force Drone Control, applicable to follow detector stage of any receiver or to use on a line. These 5 sharp filters are fixed at 300, 650, 955, 1390, and 3000 cps. Shpg wt for the set of five is 3 lbs.
Cat. 408TFIX5. All five \$325

# VHF COAX RELAY CONNECTS CHOICE OF 3 LINES TO A 4TH

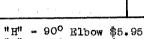


Gen. Commun. #3N120RC has 24v Ledex selector, control plug pins, and 4 type N constant-Z coax plugs to enable selection among 3 antenas (for example) to feed a receiver. In heavy sealed shield. Shpg wt 3 lbs. Super value. Cat. 806RY39. Only....

Standard "X" Band UG 39/U Flange. This unit will dissipate 500 watts average and 100 KW peak. New \$39.95



TS-332/UP \$4.95



"E" - 900 Elbow \$5.95 900 Twist \$5.95 Waveguide to Coax

Coax Connector \$5.95 (N) adapter





TS-62/AP

\$39.95





TS-35/AP Exc. \$44.50

TS-120

AT 68/UP

"X" Band Horn

with type "N"

Miniature "X" Band

Transmitter

T-425/APX Employs L 3028B

Magnetron, 829B, ētc.

X-Band Test Set

Exc. Complete

Less 829B

Providing signal Generator, Frequency meter and watt meter functions in the 8500 to 9600 MC range. 115V - 50 to 1000 CPS powered. Exc. \$69.50



Flexible "X" Band

\$4.95

5.95

5.95

Airton Switch

Model 70960 28VDC

one input choke

flange and two

flanges \$24.50

AT 39/UP

output choke

Waveguide with

standard UG 39

"X" Band

Flanges

60"

421

24"

AM1244/APX27 Amplifier Converter employs Bomac BL-423, Varian V153/6315, 2-5842, 3-6906, BNC receptacles and complete circuitr 4" × 5 1/2" × 10" × 6 9 6 Shpg wt 10 lbs.

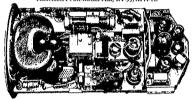
#### X-BAND SIGNAL GENERATOR



Portable Unit designed to test and adjust radar, Beacon and Microwave communication systems operating in the frequency range of 8500 to 9600 MC. Provides either FM or CW test signals of known power level and frequency. This unit contains a direct reading freq. meter and power level meter which power reference ed to one milliwatt (DBM). Used to measure the freq. and power level of the input and output ignals. Spectrum width, freq. change, recovery time and standing wave ratio. Can also be "X" Band Horn modulated externally. Operates Antenna \$5.95 from 115 volt 50-1600 cycles. Less cables, plugs adapter, pick up horn.

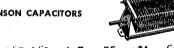
> TS 147D/UP as pictured \$49.95 TS 147D/UP with accessory Lid with cables, adapter, pickup horn, etc. \$89.50 TS 147B/UP as pictured \$29.95

#### RADAR



Like new condition in an all housing. \$39.95

#### JOHNSON CAPACITORS



5.9 to 65 mmfd .98

Type 167-161 4.7 - 55 mmfd .69 Type 167-203 Butterfly



Used PL 55 Phone Plug .69 PL 68 Mike Plug .79 PL 54 Phone Plug .49

\$19.95

\$12.50

# PRECISION VERNIER DIALS

8 - 1 RATIO Precision Dials with heavy black bake 8; I RATIO Precision Dids with heavy black bake-lite base and nickel-silver dial plates with deeply etched, clearly legible scales, Modded black knob with fluted grips. Internal parts of phosphor bronze and bross for long life dependability. Calibrated 0 to 100 in 180° totation. For front-penal mounting. Choice of three sizes: 1 1/2", 2", 2 7/8" and 4". \$189 2" DIAM, Cat, No. 240DL3- 2.......



Transistor Amplifier

This board contains transistors. zener, diodes, condensers and resistors. 2N1132, 2N2270, IN 968-B, IN 459 etc.

.49¢ each or 10 for \$4.50

Schematic furnished with order for 10 units only.



. 49 .59 .39 JK 33/34 Jacks for PL 55 & PL 68 .15

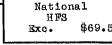
Sub-miniature indicator light for  $T-1\frac{3}{7}$  bulbs (327,328 etc) Red jewel.

Single terminal type as removed from equipment. Yellow, white, green or amber Wa 29¢ For edge lighted panels. Re-moved from equipment.

Ea 19¢ Pilot assembly for standard T-3; lamps (44-47 etc.)

# amber jewel Unused 25g Ten for \$2 h blue jewel Unused 39¢ Ten for 33

Microsmps 31.95 Direct read-ing. 32 "round





This receiver covers 220 to 400 MC in continuous tuning. Exc. \$149.50 Less outer Cover \$99.50

#### R 517/FRR 26

This one covers 2 to 8 MC single channel crystal controlled Used \$59.50

Hallicrafter SX 110 Exc. \$79.50

Heath Mohawk \$129.50 Exc.

National

\$69.50

NC 98 \$69.50 Exo.

Acorns, octals, loctals, 7 pin min.





Socket adapter: Adapts 832,829,5894, 6907, etc, to standard octal base.

9 pin min.with tube shield base.

#### 55 KW X-BAND TRANSCEIVER

- 1. I-F AMPLIFIER
- 2. RECEIVER
- 3. AFC UNIT
- 4. BLOWER MOTOR
- 5. RELAY BOX
- 6. MIXER
- 7. PULSE TRANSFORMER
- 8. MAGNETRON

9375 + 55 MC, 35-tube transceiver video detector and fixed gain circuit, utilizing the latest military circuits. video detector and variable gain cir-Incorporates the following features: cuit, with a range of 5 to 200 miles. 4J52 magnetron with magnet, 60 MC IDEAL UNIT FOR TRAINING radar IF amplifier, 10 MC band pass, 2K25 maintenance personnel. Originally used aboard Aircraft for search and circuit, 2K25 as search local oscillnavigation. Complete with tubes and ator w/ AFC circuit, two-stage 3MC magnets. Excel. Cond. Guaranteed. IF amplifier, two-stage 8MC IF amp-Shpg wt 75 lbs. Shpg wt 75 lbs.
Cat. No. 1006TXR25....\$9950

# X-BAND RADAR TEST SET

TS-146/UP EASY TO OPERATE ... PORTABLE ... VOLTAGE REGULATED

Freq. Range : 9285 to 9465 MC

Measures: Transmitter output power, Transmitter frequency, Receiver sensitivity, Receiver bnadwidth.

Tunes Receiver. Checks: Magnetron pulling, A.F.C. Circuit. Power loss through radome

dial range to -77dbm can be extended with insertion of additional external required on all tests except transmitter attenuation. Complete with all accessories except oscilloscope. Excellent, Wavemeter and attenuator calibrations Guaranteed Condition. onpg wt 50 lbs. #9950 Cat. No. 10061T\$146.... used as a power source for VSWR mea-

#### FIELD TYPE X-BAND SPECTRUM ANALYZER

Good for checking Radar systems in

Aircraft and for adjusting units on the

bench. External trigger or sawtooth

frequency and power measurements.

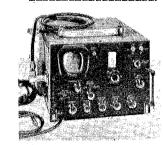
garee with Kearfott unit. Can also be

surements of waveguide. Attenuator

as local beacon oscillator w/AFC

lifier, two-stage anti-jam circuit,

automatic pulse-stretching circuit,



**Tube Sockets** 

7 pin steatite for 1625 . 3AP1 etc. 29¢

Molded bakelite for

CRT's 5CP1 , 3CP1

TS-148/UP. Band 8430-9580 Megacycles. Will check frequency and operation of various X-band equipment such as Radar Magnetrons, Klytrons. TR Boxes. Will also measure pulse width, C-W spectrum width & Q or resonant cavities. Checks freq. vency of signal generators in x-band. Can also be used as frequency mod-'ulated Signal Generator, etc.

\$89.50

Less Pictured Accessory Cables

715A KLYSTRON POWER SUPPLY. Supply No. 1 (Beam Supply) voltage range: -250 to -400V. Max current 30ma at 200V and 50ma at 400V. Regulation: less than 1%, line or load, Ripple: less than 7MW. Supply No. 2

### Oscilloscopes

Tektronix \$249.50

514D OSCILLOSCOPE DC TO 10MC. Vertical deflection sensitivity AC from .03v/cm to 100v/cm p-p; DC sensitivity .3v/cm to 100v/cm p-p. Internal calibration provides .25u signal delay . Horizontal sweep .01s/cm to .1u s/cm. Sweep magnification

#### Hewlett - Packard

130 A GENERAL LAR & PROD. TESTING

Sweep range  $1\mu\,\text{sec/cm}$  to 15sec/cm. Calibrated in 21 calibrated ranges, 1-2-5-10 sequence with a vernier \$195 permitting continuous adjustment. Vertical amplifier: sensitivity range: 1my/cm to 50y/cm. Band

pass: DC to 300KC. Coupling:
AC or DC, Input attenuation: 14
calibrator ranges in a 1-2-5-10 sequence with
a continuous vernier adjustable between ranges.

TDA-2 RTTY Test Scope \$49.50

MAW

Navy portable transceiver 2 way AM or MCW radio communications in ten preset crystal channels in the range of 110 to 156 MC. Complete with vibrator power supply.

\$ 25.00

TUNING FORK

Hill Electronics (Heemco) model FS 73200

800 CPS 28 VDC Input.

Precision frequency source in octal tube based holder.

Unused \$14.95

#### BERKELEY

1452 DIGITAL PRINTER. Connects directly to any Berkeley 5510, 5571 or 7000 series instrument, prints dato in digital form on standard adding machine tape. May be modified to print "Time" or "Code" information simultaneously with data; 6 digits. \$69.50

#### Collins

Collins Aluminum sub-chassis. This is not a printed circuit board. All items are tied to standoff terminals and have sufficient leads for reuse. Quantities listed are minimal or undetermined.

38 tantalum capacitors Also

12 precision Zaners 85 diodes

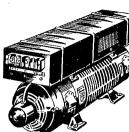
8 transistors 100 precision res. 85 resistors

Jacks Connectors Teflon ins.

\$ 2.95

### Hewlett - Packard

(Reflector Supply) voltage range: 0 to -900V. Max current 101 amps. Regulation ±1%, line or load. Ripple: less than 10MV. Filament supply: 6.3VAC at 1.5 amps. Provides square wave modulation. ...\$69.50



INPUT 27.5 V.D.C. 150 AMPS OUTPUT 1/3 PHASE 115-200 VOLTS P/N # E1725-1

Excellent Condition. 95 00

Cat. No. AC14..

ECLIPSE-PIONEER

400 CYCLES

Shpg wt 85 lbs.

9 P. F.



12,000 RPM AC OUTPUT 115 V. A. C. Excellent Condition. 400 CYCLE 3 PHASE . 15 AMPS

Shpg wt 16 lbs. Cat. No. AC24.

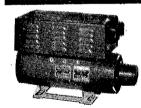
### ECLIPSE-PIONEE

.3 P.F.

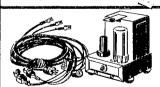


Input: 24-28 vdc 75 Amps; Output: 115 V, 800 cps, 1 Phase, 10.5 A. Size: 12 1/2" x 4 1/2" x 7 1/2". Voltage and Frequency Regulated.
Excellent Condition. \$2450 Shop wt 18 lbs. Cat. No. 2306AC13....

#### WINCHARGER 750 VA



Type PU-16. Input: 24-28 VDC. Output: 750 VA of Single Phase at 115 V. Voltage and Frequency regulated, with Radio noise filter. Size: 15 1/2" x 10" x 7 1/2". Excellent Condition. Shpg wt 45 lbs. Cat. No. AC18.....



#### SUPPLIES 300 V DC, 90 MA Radiart 6821 A (RCA MI-8319A) used

to mobilize AR-77 & AR-88 rcvrs. Input 6 to 8.5v dc as selected by a 4-position switch to xfrmr taps. The vibrator is Mallory 634C or Radiart VN-10 or any 4-pin non-synch re-placement. At full load, the pack draws 12 amps. A 15A fuse is in the battery cord furnished. An OZ4 tube rectifies. Output is filtered. New, with instruction book, schematic, & parts list. Shpg wt 12 lbs.

Cat. 1006VP1. Only...\$6.95

# CRYSTALS

FT 243

10 for 5.60 or

Frequencies in K.C. Fractions (if any) are omitted

1075 1930 1940 1955 2185 2195 2230 2315 22310 2315 2495 2495 2535 25555 2665 2945 3010	3015 3020 3025 3030 3065 3070 3085 3085 3090 3105 3120 3125 3120 3140 3145 3150 3155 3160 3165	3170 3175 3185 33970 3995 4095 4175 42195 4430 4460 45680 4620 4620 4730 4830	3870 4885 4920 4930 49950 50995 50995 5105 5235 5485 55720 56825 58825 58825 58825 58825	5850 5875 5892 59900 59950 5950 5975 6150 6175 6206 6225 6225 6227 6227 6315	63350 63350 63350 63575 63775 64005 6420 6420 6420 6420 6420 6420 6420 6420	6606 6625 6640 6645 6645 6675 6825 6840 6875 6925 6940 6975 7107 7125 7300 7325 7340 7350	7373 7375 7425 74260 7450 7475 7500 7525 7530 75540 75560 7575 7580 7680 7680 7680 7650 7650	7666 7673 7675 7700 7706 7720 7725 7741 7750 7825 7840 7850 7875 7900 8050 8116 8173 8175 8180 8200 8206	8225 8230 8230 8270 8290 83200 83200 83320 83320 8450 8455 8455 8455 8655 8655 8653
3010	3165	4830	5840	6315		7350	7650 7660	8206	8 <b>6</b> 8 <b>3</b> 87 <u>25</u>

Crystal Assortment - 100 for \$7.50 OVEN

You get at least 25 of each of FT 243-FT 241-CR1 & Miscl.

Specials 100 KC 1000KC DCZX HC6 1.95 ea. 3 for 5 2.50 - 3for

> 100 KC in APN4 Holder \$2.95

100 KC in DC2X Holder \$1.95

100 KC in James Knight Holder \$2.95

Minimum Crystal order is \$3.00

1000 KC

DC 9 Crystal for freq. meters

APPOW SALES-CHICAGO INC.

BC 221 & LM

\$3.95

HC 6 Metal Holder

296

308

1250

1650

1734

for 12500 13500 27085 27500 35000

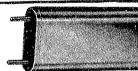
HC 6 \$2.50 1000 KC \$2.50 500 KC 2000 KC \$1.75 2000 KC in 24 VDC Oven \$2.50 3000 KG \$1.75 10000 KC \$1.95

HCl3 or CR 37 A/U Metal Holder \$3.95 100 KC

6 Volt 12 Watt 750

Crystal

complete with 204 KC



CRI

Frequencies in K.C. Fractions (if any) are omitted

\$1.25

Predagnoror	711 114 W		- min - /			
5590 6760 6161 6788 6440 6805 6450 6827 6475 6861 6523 6880	7350 7 7860 7 7372 7 7410 7 7422 7 7460 7	790 800 850 800 660 800 890 800 910 800	56 8162 71 8164 72 8178 82 8188 03 8210	8270 8272 8283 8284 8285 8294 8295	8360 8361 8371 8375 8376 8385 8400	8476 8500 8528 8529 8576 8580 8585
6530 6916 6594 6961 6600 7010 6605 7105 6630 7120 6661 7140 6716 7216 6730 7230 6738 7300 6753 7330	7510 8 7550 8 7570 8 7583 8 7590 8 7670 8 7700 8	3032 18	05 8215 85 8220 18 8236 21 8238 30 8250	8295 8300 8308 8315 8318 8328 8333 8335 8356	8412 8418 8435 8438 8440 8442 8443 8460 8475	8596 8600 8603 8607 8640 8645 8660 8661 8710



TS-452 SIGNAL GENERATOR 5-100Mc BY THE USE OF PLUG IN COILS, PROVIDES A CONSTANT SINE-WAVE RADIO FREQ. VOLTAGE 60-100 TIM ES PER SECOND.

TRAVELING DETECTOR PICKS UP THE SIGNAL TO BE TESTED WHICH IS AMPLIFIED AND APPLIED TO THE PLATES OF THE CR TUBE. THE MOST FREQ-UENTLY USED CONTROLS FOR THE SIGNAL GENERATO INCLUDING THE OSCILLATOR, WAVEMETER, VERTICLE AMPLIFIER AND NINE STEP ATTENUATOR ARE ON THE FRONT PANEL, ADDITIONAL CONTROLS ARE PROVIDED THROUGH THE DOOR ON THE TOP OF THE CASE. SIZE: 19x92x16; WT: 60 LBS.

PRICE: USED SERVICEABLE \$75.00



OXYGEN ECONOMY WITH MASK

Durable, form and individually adjustable fitting, SAFE oxygen mask designed to USAF specs. Originally used with diluter-deman military regulators, this mask is useable with almost all commercia portable and fixed oxygen systems. Provides oxygen percentage of 70% blood saturation (equal to 10,000 ft. MSL) at pressure altitude of 36,000 ft. its operating ceiling, quick-disconnect hose fitting and release hook on right

Cat. No. A-14

#### VERSATILE MINIATURE TRANSFORMER



Same as used in W2EWL SSB Rig—March, 1956 QST. Three sets of CT windings for a combination of impedances: 600 ohms, 5200 ohms, 22000 ohms. (By using center-taps the impedances are quartered). The ideal transformer for a SSB transmitter. Other uses: interstage, transistor, high impedance choke, line to grid or plate, etc. Size only 2" h. x 3/4" w. x 3/4" d. New and fully shielded.

or 10 for \$7.50



GENERAL ELECTRIC **ELAPSED-TIME METERS** 

> Unused \$9.95

Used \$5.95



MN 22 - AZIMUTH INDICATOR \$2.95

36 Volt DC expanded scale meter 2½" sealed starts 18V ₹V divisions \$2.95

**Subminiature** Toggle Switch



Micro Switch Inc. type 6AT6 SPDT - only " x 4" x 4" behind panel. Removed from new equipment.

Aluminum panel 17 x 4" with 12 of these switches mounted only ----\$5.00



SPDT with integral leaf actuator. Only f"x5"x4" overall. Rem. new equip. 49¢



INDICATOR 3" Scope. Front panel controls: Vertical Pos.; Horiz Pos.; Intensity, Focus, Gain, Width, Center freq.

Pan. Operates on 115 Volts 380 to 1000 cps. AC.

Tubes: 1/6AL5, 2/6BA6, 1/6BE6, 1/6AC7, 1/6J6, 1/884, 2/6SL7, 1/1B3, 1/6X5, 1/OD3, 1/6SN7, 3/28D7, 1/12AU7, 1/3BP1

used. 22.50 New \$3500

# 550 to 20000 KC IP-69A/ALA-2

115 VDC, ADJUSTABLE CONTACT FROM OUTSIDE OF CASE MARKED 10-0-10 FOR EAST-WEST TELE. 15 BANANA PLUGS FOR PLUG-IN SIZE: 6x32x32; WT: 4 LBS. \$2.50

AUDIO FREQUENCY GENERATOR

TUNING FORK

500 cycle--.001% accuracy--operates

from 24VDC at .18A

Removed from new

equipment. \$7.50

BALLANTINE

FREQUENCY STANDARD

(A) (A) (A) (A) (A)

**FERRIS** 

Field strength meter

\$34.50

Radio noise &

45.00

DUAL

S.P.D.T

Field strenght meter

150 to 350 KC and

32-B

150 to 350 KC and

550 to 20000 KC

#### PERMANENT-MAGNET MOTOR QUIET COOLING FAN



Works on 6 to 28 V dc, Removed from new surplus equipment. Shpg wt 1 lb. Cat. 306MO8. Only

PANEL MOUNTED HOLDERS for 1/4 Inch Fuses Can be used on panels up



Bayonet type knob. No 294



\$49.50

300 RMS VACUUM TUBE VOLTMETER

DA-18/U HIGH POWER DUMMY LOAD 3 X 13" WG

Frequency Range: 2600 to 3950 MC 600 watts Average Power: Peak Power: 1500 KW

UG-53/U waveguide cover flange input. 25" long in cylindrical aluminum transport case. 25 1/2" D X 29" L.

\$34.50 Used \$49.50 New

#### MILLIVAC

RM17B DC VACUUM TUBE MILLIVOLT METER. 0 to 1mv lowest range; 0 to 1Kv highest range. Input impedance: Imv range 6 megohms; 1Kv 60

SPECIAL ..... \$49.50



#### **OHM AIR FORCE HEADSET**

3. The standard low impe magnetic headset. Uses 3H1 units (300 ohms each). is a compensated magnetic with controlled damped with controlled damped hragm, almost entirely flat to 4000 cy, extra good for ch. Has HB-7 leather-cover-adjustable headband, and k-disconnect red PL-54 bail-plus. With rubber ear ions; new, spotless.

#### 8000 OHM AIR FORCE HEADSET '

-23. The standard high-impede magnetic headset. Uses R14 is (4000 ohms each), HB-7 leathcovered adjustable headband, quick-disconnect black PL-54 l-out plug. This is the resonant netic (undamped clamped diaagm) type, extra destrable for W, but also very clear on speech. w. Shpg wt 3 lbs. \$5 • 95

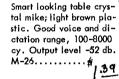
# RUBBER CUSHIONS

#### NTI-NOISE CARBON UNIT



109MC12U. Only...98¢ I-QUALITY MICROPHONES

EVER-BEFORE LOW PRICES!



#### HASE INVERTER AMPLIFIER



M-26A/AIC. Four-tube, push-pull ower Amplifier with a phase inverter ircult. Automatic gain control C-58A/AIC includes barometric unit remitting operation from 10,000 to 10,000 ft. Complete with 28 VDC lynamotor. Excellent Condition. Shpg wt 15 lbs. 5995 Cat. No. 1006AX15...



HS-30. 256 ohms. Soft rubber hangs in your ear-lobes below (not in) your ear canals. With cord as shown. New. Shpg 

#### CONTACT CARBON MIKE



T-30 Throat Mike has 2 buttons. Use one or both. Changes contacttransferred sonic vibrations into audio frequency electricity when put in series with a 3 volt battery. New. Shpg wt 1/2 lb. \$1.95 Cat. 106MC13...

Used .79¢



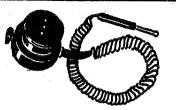
Cord CD-508 plugs into above mike. las press-to-talk switch and 4' branch ending in standard 3-circuit mike plug PL-68. New. Good value. Shpg wt 1 lb. Cat. 109CC5. Only. \$1.95

HANDSETS SOUND POWERED

TS-10, 25 miles with no external power. Parallel as many as you wish. Useful for TV antenna installations in plants where inflammables are used. Clip a TS-10 on each end of a 2-conductor line, and you have immediate communication.

BRAND NEW, each Per pair ...... 18,50 \$ 97.5 WEIGHT 3 lbs.

#### NAVY & CAA TOWER HAND MIKE



#### NAVY & CAA TOWER HAND MIKE

RS-38 carbon microphone. Quality has to be very high before the CAA issues a type approval. This one is CAA Type Certificated. Fits in your hand, with press-to-talk switch on top. Has a spring-loaded "Curly Cord" 1' long which stretches out to 41/2', and 3-circuit PL-68 New Condition, new. Shpg wt 1 lb.

RS-38 Mike Hanger \$ 100 \$ 750

# carbon mike.

#### AIR FORCE HAND MIKE

T-17-D. The D-Model is the only one which is CAA Type Certificated, with built-in capacitor for best concentration of power in only that frequency spectrum which contributes to intelligibility. The Aristocrat of carbon mikes. Has handy molded-in hook to hang it up. Press-to-talk switch on the side makes the mike circuit before it fires the control circuit. Latest model. Brand New. Shpg wt 2 lbs. 1875 Cat. 986MC11.....

CHAMOIS PADS

NAF-48490-I. New, Pair..... \$.3.95 Not NAF. New, Pair..... 2.95

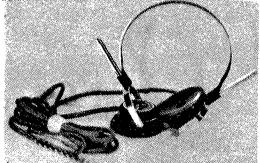
#### THE ORIGINAL \$45.00

### HIGH-FIDELITY

# FOR MUSIC-FOR MONOTORING

These original Permaflux Hi-Fi units use annular grooved plastic fibre cones with voice coils as in speakers. Each unit has a built-in Hi-Fi 8 ohm to 300 ohm transformer. The pair is 600 ohms. Chamois cushions along with a leather headband equipped with cord and PL-54 plug are provided. A CD-307 5 foot extention cord described wided. A OD-SO, above is optional. These sets are new.

\$12.95



AN UNUSUALLY LOW PRICE FOR THIS POPULAR, MULTI-PURPOSE HEADSET.

Shpg wt 3 lbs.

\$2.95

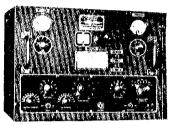
15 to 600 KC

RBA Navy low frequency

Receiver

Communications receiver 15 to 600 KC in 4 bands TRF circuit. Good used cond. \$69.50

Power supply for RBA \$25.00



Selenium Cartridge Rectifier



High voltage low current. Excellent for scope power. 3000 PIV @ 10 MA. International Rectifier.

98¢ ea 6 for \$5



KEY. Heavy brass base is drilled for mounting screws. The eight ballbearings supporting the key are completely adjustable for friction. Has 1/8" pure silver contacts and is easily adjustable for contact spacing and tension. Semiautomatic keys can be plugged in if desired.



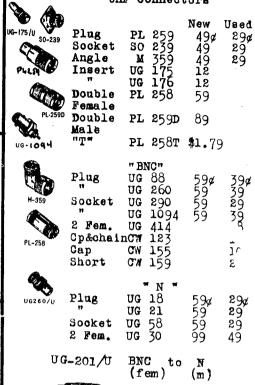
500 MMfd

No. 9-KY-301.

15¢ each 10 for \$1 100 "

#### **COAX CONNECTORS**

UHF Connectors



New 69¢ ea

Ten for \$5

# WESTON

311 Potential Transformer 6900-3450 Volts to 115. Capacity: 25VA-50 to 2400 CPS 15.00 8008 Type 2A Moisturonic 35.00 Moisture Meter

AT-4/ARN-1 AIRCRAFT ANTENNA. For APN-1 and \$12.50

Megohmeter 772 Voltohmeter 45.00 35.00

BUTTON MICA CAPACITORS
COMPACT SIZE

RT-122/APW-1" REC. -TRANS.

THE PULSE POSITION MODULATED SIGNALS OF THE

AN/MSQ-1. THE TRANSMITTER CONTAINS CIRCUITS

BETWEEN THE TWO REPLY PULSES. THE RECIIVER-

TRANSMITTER RECEIVES INPUT PULSES TRANSMITTED

AT A PULSE REPETITION FREQUENCY OF 410 CYCLES

PER SECOND AND A PRESET CARRIER FREQUENCY

Entire transceiver

With all tubes 14.95

less tubes

FOR ENCODING THE REPLY BY VARYING THE SPACING

RT-122/APW-11 RECEIVER TRANS-MITTER, THIS UNIT CONSISTS OF A TUNABLE RECEIVER CAVITY, A CRYSTAL DETECTOR, A VIDEO AMP LIFTER, DECODING CIRCUITS, A TRANSMITTER AND CIRCUITS FOR OB TAINING AUDIO FREQUENCY TONES FROM

Meter Relay

Simpson model 85--3+\*R 32 to 64 VDC range adjustable to both upper and lower desired limits 2,95

#### SPRING COIL CORD



conductormicrophone cable with lugs in both ends. Normal length is 18 inches. During use it will expand to over 5 ft. Heavy rubber casing to insure long life.

\$1.00 each

Test Oscillator

Nice aluminum cabinet

(BC 221 style) contains

Weston 0-1 MA meter, 3 CR1

crystals, six tubes, slug

tuned ceramic coils, 1N21

etc, etc, in excellent con-

xtal, cavity, switches,

dition - all for only

6 for \$5.00

#### \$2.95 BUYS A BALL-BEARING AC/DC MOTOR, 12/30 VOLTS

Univ. Electric's 27C7, made to Air Force specs. Totally enclosed series wound. 1-5/8" dia., 2-9/16" long. Turns CCW looking at shaft end, at 9500 RPM, approx. . 01 HP, continuous blower duty. 1/4" shaft, 3/4" long. New.2 lbs shpg. 3295 Cat. 306MO11. Only.... HICKOK Tube Adapter

Update yuor tube tester with this Hickok adapter for checking 829, 832, 5894, 82-3, etc. power tubes. #E-105 N.

New 1.00

**Arrow Sales** 

#### MICROPHONE BUTTONS Western Electric gold plated microphone el-

ements suitable for many "pickup" applications. Only 7/16 " diameter. THREE FOR \$1.00

WESTERN ELECTRIC Head-phone--Chest-mike

This combination offers a high quality single phone along with a horn type carbon mike that is highly efficient. Hand free operation lends a hundred uses. New condition --



High impedance headset, 4000 ohms, of black plastic with an adjustable spring headband for a snug comfortable fit. Complete with a long flexible cord and two standard phone plugs.

PROFESSIONAL TYPE PHONES

Cat. No. 506ES48...

FUNCTIONAL DESCRIPTION: A portable general purpose, field-type, hand tuned unit used to provide simple and rapid means of determining the overall system performance of radar sets. It is used to make the following radar equipment checks: comparative measure ment of the average power output of the radar transmitter,

determination of the frequency spectrum, multiple moding, and frequency pulling of the radar transmitter, and the speed of recovery of radar T-R box and receiver. Resonance is indicated by meter deflections and frequency is read on the tunina diál.

POWER SUPPLY: None required. FREQUENCY RANGE: 8990 to 9610 megacycles per sec. TYPE OF RECEPTION: Continuous wave or Pulsed. RING TIME: 25 microseconds or 4,000 yards with a transmitted pulse width of 3/8 microsecond. Q: Approximately 60,000.

FREQUENCY ACCURACY: Difference between errors at frequencies 60 megacycles per second apart: 1.5 megacycles per second. The maximum frequency error over the range 8990-9610 megacycles per second. (Accuracies measured at 77°)

METER RANGE: 0 to 20 microamperes.
METER SENSITIVITY CONTROL: 0-25 decibels in 1 decibel divisions.

TEMPERATURE RANGE: -54°C. (-65° F), to +60°C. (+140°F)

Order No. TS-488A/UP..... Shpg wt. 50 lbs.

\$189.50



0

BC-788C RECEIVER-TRANSM-ITTER ALTIMETER, PULSE TYPE TRANSMITTER OUTPUT 50 WATTS. FIXED FREQUENY 440 MC.With Tubes 3/616, 1/616,9/6AG5 AND 1/5Y3GT

DPERATES FROM 115 VOLT 400 TO 2400 GYCLE.

SIZE: 152x9x8; WT: 13 LBS. PRICE: USED \$18.95

-274/ALA-10 PANORAMIC DAPTER INDICATOR; FOR USE APTER INDICATOR; FOR USE TH RECEIVERS HAVING 30 MC. F. FREQ. FRONT BANEL CONTROLS, PRF, HOR, CENTER FREQ. ITENTSITY, FOCUS, SYNC, PAN MC. WITH TUBES 3BP1, 1B3, 13, 3/28D7, 12AU7, 6SN7, 884, 6SL7, 6J6, 6AC7, 2/6BA6, 6AL5 & 6BE6. POWER REQ. 115 DLT 380-1000 CYCLE.

RANSFORMER OUTPUT VOLTAGE

.25v .2a,650v 2ma,300vdc 70ma,

Exc.

\$14.95

### COUPLER

NTENNA COUPLER FOR EMOTE OPERATION. ANGE APPROX. 2 TO 24 c. 200 WATTS. MOTOR-ZED VARIABLE VACUUM APACITOR SUU MINI . 500 volts. Also Rot-

RY INDUCTOR, SERVO
OTORS, FAN, 10 PLATE
YPE RELAYS, SWITCHES, CAPACITORS, RESISTOR
UBES 4/5727.2/5670,3/6201 etc.



Designed to measure Pulse or CW frequen cy in the 3CM or 9 CM band. Uses a tun eable line coupled by a inductive loop across a crystal circuit. Indication is on a 3" 0-200 DC Microampere meter.

UNUSED \$14.95

#### **COLLINS**

R 388

Receiver

\$395.00

Receiver Unit R-105/ARR-15



General: Covers 1500 to 18500 KC. I.F. of 500 ke plus or minus 50 kc one oscillator determined by 100KC crystal and harmonics of 100 KC are used for calibration. Two other oscillators are variable 2000 to 3000 KC and 450 to 550 KC (BFO). Both variable oscillators are precision built both mechanically and electrically, providing exceptional stability Good condition with all tubes, 100 KC crystal and schematic or a copy of "73" magazine cowering conversion if conversion is desired.

> a modern PTO receiver in the classic Collins design



TS-239/UP OSCILLOSCOPE

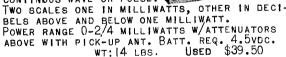


### POWER METER

PORTABLE GENERAL PUR-Generator

POSE, BATTERY OPERATED INSTRUMENT USED TO MEA-SURE RADIO FREQUENCY POWER IN THE 2400 TO 3335 MEGACYCLE RANGE. CONTINOUS WAVE OR PULSE.

TS-125/UP POWER METER





\$40.00

UPM-8

Signal

FIXED FREQ. FOR ALRORAFT MARKET BEACON USE . DESIGNED TO RECEIVE RADIO SIGNALS TO DELIVER AURAL AND VISUAL INDICATION TO THE PILOT SO THE POSIT-ION OF THE AIRCRAFT CAN BE IN RESPECT TO A FADIO RANGE STATION. RECEILS

R-122/ARN-12 RECEIVER: 75 MC AM SIGNALS MOD. AT 400,1300 & 3000 cps. sig. Operates from 24 vdc. With Tubes 5/AJ5,2/6AL5 & 2/28D7. Crystal control oscillator, 6.9 Mc. IF.NO INDICATORS. Size: 10x5x6; WT: 10 Lbs. Price: used \$6.95

#### MOTOROLA Mike

TMN-6000 or similar-Transistorized mobile microphone complete with coiled cord-used but guaranteed operable.

#### Motorola Test Set

Convert this handsome piece of surplus gear to a Motorola test set. Beautiful two piece aluminum carrying case with 3%" 100-0-100 microamp meter, ceramic rotary switch microswitches, octal based crystal oven to fit small metal can crystals, and many other parts. New \$14.95 Used \$10.95

#### ARROW SALES - CHICAGO INC. 7049 W. ARCHER AVE. CHICAGO, ILL. 60638

Walkie Talkie

RT-285A/URC11 243 MC combines transistors and tubes for compact size  $4 \times 3 \times 1 \ 3/4^{\text{ft}} - \text{Built}$ in mike and earphone and collapsible antenna Less Batteries \$24.50

RT-159A/URC 4 VHF-UHF Dual channel 121.5 and 243 MC Transceiver Less Batteries \$24.50

#### DOUBLE - CONVERSION.

R-4/ARR2 Receiver

This versatile command size receiver is being used on everything from BC & citizens band to 420 MC. Designed to cover 234 to 258 MC it has 11 tubes with a first 1F of between 540 & 1030 KC switched by 12 pre-tuned coils manipulation of which provide the fun. 2nd IF is 200 KC. Includes BFO. Furnished like new with tubes and schematic. \$6.95

#### **COAX RELAY**

Danbury-Knudson Type CR 26 24/48 VDC - SPDT - 100 Watt Uses BNC connectors. \$4.95

DANBURY-KNUDSON Type CS 300

24 VDC - SPDT - 100 Watt BNC connectors

\$1.95

ARC 27

Audio Unit.

nominal cost)

Less Tubes

畫

MOTOR S MOTOR

O TEST O

0

 $\alpha$ 

I.F. Amplifier and

(Tubes available at

UG88 BNC connectors For these relays: Used 3 for \$1.00 New 3 for \$1.75

#### RIGHT ANGLE DRIVE

Govt. #MC-211A used with flexible shafts. Having male and female splined couplings, Mfg. by W.E. Co

.30 ea.

#### A. R. C. TYPE 12 EQUIPMENT

Manufactured by AIRCRAFT RADIO CORPORATION





R10 Receiver - B/C Band 520-1500 KC New \$17.5. Used 12.5	
R11 " Q-5er 190-550 KC New 17.5	
Used 12.5	
Less Tubes 6.7	5
R13 " Aircraft 108-135 MC Used 24.5	Э
Dented & Less Tubes 12.5	Э
R19 " Two Meters 118-148 MC Used 19.9	ö
New 39.9	5
T13A Transmitter 118-148 MC Used 24.5	)
20 channel Crystal (HC6 Metal) Used 29.9	ō
With 20 random Xtals 37.5	
TV10 Transverter (8 crystal channels)	
Transmits 228 to 258 MC	
Converts 228 to 258 MC signals	
to 118 to 148 MC New 24.5	Э
0744 Control box - calibrated for R11,	
it may be recal. for the other	
receivers listed above. Used 1.7	5
MC-215 Mechanical linkage with spline	_
fittings. 1.0	)
PL-151 6 pin connector	_
PL-152 8 pin connector Ea5	
D-10-A Dynamotor (specify 12 or 24 V) Ea. 10.00	J

tubes.

Converter Sub-assembly

P/O CV89A/URA-8A

Discriminator sub-unit part of frequency shift converter CV89A/URA-8A. This unit cost the Navy #330.00 and is brand new in original export packaging complete with tubes. Schematic and

connector arrangement for input and output is

furnished with order. Shipping weight 15#

#### BENDIX Antenna Relay Model 3984

DPDT ceramic insulated antenna relay completely enclosed in good looking aluminum box 2"x3" x4" with 3 spring loaded external posts. Operates on 12 or 24 volts DC. New cond. 72.91

\$22,50

RT82/APX-6 1215 to 1296 MC

Transponder complete with

#### Schematics

I 81 and I 82 Tone Filters R4 ARR2 BC 620 BC 659 R 122/ARN12 R10/ARC12 65¢ each PRS 3 ID 169 BC 458 ARC 5 Receiver

95d each

SCR 522 T 61/AXT2 SCR 274N Receivers SCR 274N Trans. MN 260 R 19 ARC 12 BC 779 Super Pro R 105/ARR15 CV 108/URA8

CV 253 ALR ARC 4

R111A/APR5 APR 4

13





A portable teletypewriter signal distortion test set arranged to transmit normal or distorted signals for testing teletype writer circuits and

RTTY

TS 2/TG

equipment.

88 mh Torroids •79 I-97A Bias meter 7.95 1.49 GH 1203-2H Lionel transf. \$25.00 I-193 RTTY relay test set

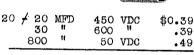




1,000		it		
.0001 .0001	MFD	9000 5000 5000 1250	VDC	\$6.98 1.78 2.28

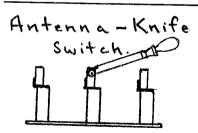
25 MMFD 10000 VAC \$0.99

### Electrolytics



#### Tantalums

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.1 1.8 4.7 22 27 33 36 60 100 390	MFD  11  11  11  11  11  11  11  11  11	75 30 35 30 30 75 150 50 30	VDC	\$0.25 .25 .29 .29 .39 .39 .49 .59



Heavy Duty
SPDT - 2" x 8" x 3" H 1.49



4 figure mechanical 89¢

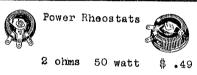
IN 4007

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ELECTR	MW	13			
	SABAGUE	, 44		IN	11: 30:
	DWORLYT Type 860 (			IN	119
(4.00 A)	any esp			MW	368 18
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MFD	<b>y</b> \$	o e w	Price	IN	25
10200	10	10	05		

MFD	<b>y</b>	Q e W	Price
10200	12	10	• 95
12000	14	11	• 95
17000	18	15	. 95
60000	25	20	2.95
11500	30	25	• 95
4000	40	33	.95
7400	4.5	35	. 95
18000	45	35	2.45
12800	100	75	2.95
1400	120	100	. 95
3000	135	100	1.95
Pig	tail 1	Lytics	
2000	,	20	•59
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3000	135	100	1.95
Pig	tail	Lytics	
2000		2.0	•59
2000		15	•49
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Octal	Plug-	in	<del></del>
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2000		10		39
Octai	l Plug	-in		
30 - 6	600 VĎ	C	39¢	ea.
lO for	\$3.25	100	for	\$25.00



2	ohms	50	wat	t \$ .49
50	11	50	11	•98
90	Ħ	50	**	•98
90	11	100	Ħ	1.19
125	11	50	11	1.19
1250	Ħ	150	11	1.95
25000	17	4	#1	(Pot),49

ELAPSED TIME INDICATOR

but guaranteed operable. \$2.95

Haydon 7008-002

TYPE RH

2 watts

115 V 380 to 420 CPS

Range: 0 to 10000 Hrs.

Removed from equipment

#### SILICON RECTIFIERS

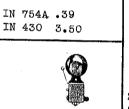
		SI	מטי		O
MW EN W IN	1306 1190 303E 1192 368B 150 341A 253	150 Amp. 35 th 18	50 PTV 600 " 300 " 100 " 100 " 50 " 100 "	\$2.95 2.95 1.95 1.39 .95 .49 .49	
		To	pHat		
W W	160 140 <b>12</b> 6	1.5 " 1.5 " 100 MA	800 H 600 H	.59 .39	H

EPOXY (Mini)

1 Amp 1000 VDC

Ge	nera	al Pu	rpose	
IN	82 198	.29		
IN	263 457	.29		
IN	497	.15	1 2	
IN	645 914	.39 .15		

77.71	Ch	• 200	1
IN	198	•10	
IN	263	.29	4
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IN	497	•15 g	Ţ
IN	645	.39	
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IN	754	. 39	
TM	170	7 50	



6 Volt Bell Miniature 14" Diam, 3" x 1 x 2 0.A. New \$1.25

### TERMINAL BOARDS

	-	O / LIL D D	
	4	Term.	.19¢
-A-A-A-A-A-T	6	1)	•26¢
	8	11	.32¢
	L2	17	.39¢
2	30	11	• 59¢
			•

•59

#### ROTARY SWITCH



2 deck - 17 positions each. Heavy duty MYCA-LEX stator - CERAMIC rotor - for low loss high resistance insulation - silver contacts late military type. Max. diam. 2 inches.

New \$1.95

### ILLUMINATED MAGNIFIER

WITH CALIBRATED MEASURING FIELD...
NO DESK OR WORKBENCH SHOULD BE WITHOUT ONE

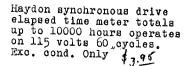


This magnifier free if you ask for it with \$17.50 order.

#### RUNNING TIME METER

250 Watts

5 Ohms 3%



ARROW SALES - CHICAGO, INC.

#### HEINEMANN CIRCUIT BREAKERS

AM 12 HK 4 Amp - 50VDC Max tt 6 " .49¢ each

AM 33 MG 3 - 12.5A 120VAC 60cps .59¢ each 10 for \$5.00 100 for \$40.00

14

#### LATE SPECIALS

118 to 148 MC

R19/ARC Receiver with tubes \$19.95

190 to 550 KG

ARC-3 100-156 MC

T67/ARC3 100 to 156 MC

transmitter less tubes

complete with tubes

complete with tubes

Plugs 10 for

\$10.95

\$29.95

\$29.95

Insulated Tip Jacks and Tip Plugs

Banana Jacks & Plugs

20 of either (or mixed) \$1.00

Insulated Alligator Clips

10 for .99¢ (5 red - 5 black)

G 25A Fully Enclosed cylindrical

HAND - GENERATOR

\$2.95

GN-38 '\$4.95

Generator with crank assembly

Crank Knob 59¢

2 1/8" Diam.

for 1/4" Shaft

(rem. fr. Equip)

Jacks 10 (5 Red - 5 Blk)

ARC3 Transmitter

R 77/ARC3 Exc.

T67/ARC 3 Exc.

Rll/ARC - Q'5er Receiver with tubes Exc. \$10.95

# RECEIVER



Transistors

2N329

2N352

21396

21657

2N697

2N1050

2N1132

2N1150

2N1302

2N1305

2N1375

2N2270

2N2876

2N2907

.79¢

\$1.00

.50

.25

.75

.25

.35

.20

.20

.40

.25

..85

3.75

4.00

#### FREQUENCY METERS

BC-221\* 125 to 20,000 KC \*(various models in stock) From \$49.50 to \$79.50

TS-175 - 80 to 1,000 MC \$124.50

RA-133 - Power supply for meters above. (These are original govt.equipment and fit internally) *\$*34.50



Frequency Meter

ARROW

10000 MC A FINE SAMPLE OF

TS-186/UP is a crystal

type frequency meter. Power required is 115VAC

Frequency range is 100

to 10,000 MC, CW, MCW or

controlled, heterodyne-

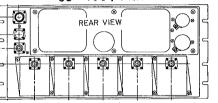
TS-186D/UP

QUALITY TEST

\$99.50

**EQUIPMENT** 

#### ANTENNA COUPLER CU- 168 / FRR



Antenna Coupler CU-168/FRR is a device which couples up to five independently operating receivers to a single receiving antenna. primary power source can be either 105, 115, or 125

volts, at any frequency from 50 to 400 cps, single-phase. Each of the five r-f amplifiers contains four type 12AU7 double-triode amplifier tube and related components. Exc. \$49.50

Tech Manual \$3.50

#### POLARAD

SSR



Micro Wave Signal Source 630 to 1300 MC

# WE BUY — WE TRADE

50 to 1000 CPS.

WHAT DO YOU HAVE???

### **POWER SUPPLIES**

pulse.

Variable A.C.

Zero to 135 VAC 60 CPS at 4 Amps from 90 to 125 input.

Output is regulated.

This unit has Variac for continuous coverage. It is the R500 Regulated Voltbox by Superior Electric. \$49.50

> Zero to 300 VDC at 1 Amp.

SorengE 300-1 Nobatron Input is 90 to 130 V.60 CPS. Employs 2-3B25, 8-6AS7, VR150 etc. plus both current and volt meters. \$49.50

Hi Volts

PS-4 High voltage power supply for up to 12" CRT's, plus 6.3 and 2.5V and intensity and focus controls.

Fully enclosed in nice size ventillated cabinet. \$9.95

6 to 62 Volt DC

at 5 amps

This versatile power supply employs a constant voltage transformer, T47604 described on the transformer page, 5 separate computer grade filter capacitors and 10 Westinghouse #368B Silicon Diodes rated at 15 amps 100 VDC

The outputs at each of 5 points can also be combined, and 23 voltages between 6 and 62 at a minimum of 5 amperes each can be obtained.

The voltages between 6 and 21 have 10 ampere capability. \$27.50

> Regulated Power Supply for various units

PP 106/U - Voltage adjustable

90 to 300 VDC at 85 MA with simple knob control; also select AC of 6.3 at 5A, 12V at 2.5A or 24 V at 2.5A \$19.95

Zero to 500 / Zero to 150 VDC at 500 MA

Sorensen 500BB Nobatron Input is 115 V-600PS Variac controlled for continuous coverage. 2 Large 45" Square meters for both current and voltage outputs. \$69.50

Polyethylene insulation .015" (12 solid conduc-

tors)

6 Conductor #18 Stranded - Rubber Outer jacket - shielded inside

6 Pair combination( 1 pr #18-6 pr #22

Intercom Cable

PVC Jacket 3/64"

100' for \$5.95

### **Command Sets**

Receiver R27/ARC5-BC 455 6 to 9 MC with tubes \$16.75

R 25/ARC5 1500 KC # 3000 KC with tubes

\$24.50

Other Receivers

190 to 550 KC 550 to 1500 KC 24.95 3 to 6 MC 24.95 .98¢ ea. - 3 for \$2.75

85 KC - IF Transformer

Transmitter

Used \$4.95

2830 KC IF Transformer .39¢ ea. - 3 for \$1.00

BC 442 Antenna

New \$7.75

T21/ARC5 - BC 458

5.3 to 7 MC

Current meter New - Complete \$4.95

New - Less Vac. Capacitor\$3.50

WE BUY - WE TRADE

WHAT DO YOU HAVE ?

TS-375/U

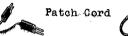
BC 610 Tank Coils



C 454 C 454V 1.5 to 2 MC \$1.00 1.5 to 2 MC with variable link



Antenna Type Relay with SPDT contacts having an RF capacity of 150 to 200 watts; has an additional SPST - N.O. set of contacts available for auxiliary use. Dual coil for 24 VDC operation may be paralleled for 12 VDC use. Silver contacts - ceramic insulation - Size 2" x 1 3/8" x 1 5/8". SPECIAL \$2.25



Twin Plug each end - 5' Long \$2.25

PL55 to PL 55 48" Long

Test Oscillator

Teletronics Labs - 19 Push button frequencies starting at 400 cycles and up to 70 KC. Each is variable plus or minus 15 % with aid of front panel control. Outputs of low and 600 ohms.

Exc.

V-T-V-M Exc. \$45.00



SS 10- 2 level - 13 steps each 1 level - 26 steps 24 or 48 VDC New \$3.95

16

# MT-220A

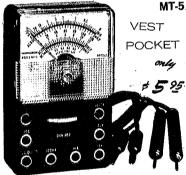
#### PROFESSIONAL DELUXE **VOLT OHM METER** ACCURATE-EASY-TO-READ

A compact, precision VOM with 1% resistors and single range selector dial.

DC volts: 0-2.5-10-50-250-500-5000 volts at 20K ohms per volt; AC volts: 0-10-50-250-500-1000 volts at 10K ohms per volt; DC current: 0-0. 05-5-50-500 ma. Resistance: 0-12K-12OK-1.2

\$12.95 Meg-12 Meg. Decibels: -20 to + 62db. Case dimensions: 5-1/2" x 3-1/2" x 1-1/2". Complete with test leads and battery.

FINE PRECISION VOM MINIATURE "TINY TESTER" ACCURATE, DEPENDABLE,



1,000 Volt Ohms AC, 1,000 Ohms DC, AC Voltage: 12V, 1200V, DC Voltage: 12V, 120V, 1200V, DC Voltage: 12V, 120V, 1200V, DC current: 1mA and 120mA, Resistance 100K Ohms, Measures only 2-1/4" x 3-1/2" x 1-1/8". Complete with standard banana jack, test leads and battery.

### BRIGHT-VUE PANEL METERS 2 POPULAR SIZES

Range	Small	Price	Large	Price	
0-50 Microamps DC	P-18	5.95	P-1L	6.45	
0-100 "	<b>P-</b> 2S	4.95	P-2L	4.95	
50-0-50 #	P-188	5.45	P-18L	5.95	
100-0-100 %	P-3S	4.95	P-3L	5.45	
0-200 #	P-4S	4.95	P-4L	5.45	
0 <b>-</b> 500 "	P-58	4.25	P-5L	4.75	25-,87-,09
0-1 Milliamps DC	P-6S	3.95	P-6L	4.75	1.62 1.25
0-10 "	P-318	4.25	P-31L	4.75	PMC-S SERIES
0-100 <sup>11</sup>	P-78	3.95	P-7L	4.75	2.10
0-200 #	P-8S	<b>3.</b> 95	P-8L	4.75	257
0-300 "	P-98	3.95	P-9L	4.75	PMC-L SERIES
0-500 "	P-los	3.95	P-10L	4.75	
O-15 Volts DC	P-118	3.95	P-11L	4.75	
0-30 " "	P-13S	3.95	P-13L	4.75	
0-500 " "	P-158	3.95	P-15L	4.75	VU-100C Small \$4.98
0-15 <sup>11</sup> AC	P-128	3.95	P-12I.	4.75	VU-102C Large \$5.48

P-14L

P-16L

P-168

0-10 Amps DC

### FIELD STRENGTH METER

\$6.95

A compact 1 to 250 Mc unit designed for checking antenna efficiency, load matching, etc. Batteries and other power sources are not required. Features easy-to-read plastic-enclos

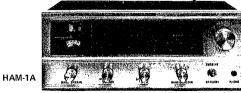
monitor lack and telescoping antenna that extends to 10-3/4". A grip magnet is mounted on bottom of case. neione: 2.3/16 x 3-3/16" x 1-9/16".



\$59.50

FEATURE-PACKED SUPERHET RECEIVER

FEATURE-PACKED SUPERHET RECEIVE
A budget-priced 535 Kc to 30 Me receiver with all
the popular features. The HAM-1A has a sensitive
"S" meter for signal strength evaluation, and wide,
slide-rule dial, it also features Calibrated Band
Spread, AVC noise limiter, BFO stand-by switch
with terminal transmitter, phone jack and big PM
speaker. A powerful built-in antenna brings weak
stations in loud and clear. Comes in metal cabinet
with handsome, brushed aluminum control panel.





250 to 20000 CPS 100000 ohms to 600 C.T. 5 MADC 600 1 -(4)

\$1.95 Hermetically Sealed

Super - Matching

22K

CIT

exclosed becalese

Ouncer Size

3/4 x 3/4 x 1" .98¢

MIDGET TRANSFORMER

FOR TRANSISTORS

1/2" 5g. × 3/4"

open Frame

CHOKES

130 MA

2H

294 sa.

600

125K 3

نفععومهما معمومهم

5200

6 452

& ohms

12V-60Ambs 24 V- 30 Ambs

750 VA

Amberage

24 Volts

High

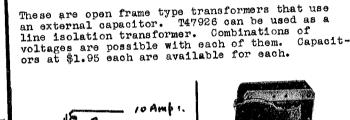
12 Volt+

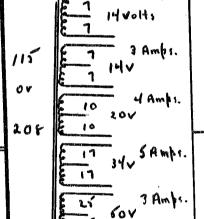
**TRANSFORMERS** 16 voits - 32 voits 750 VA. 16 v - 45 Ambs 32 v - 23 Ambs Abbrox. 41/2×41/2×7 \$ 17.25

# CONSTANT VOLTAGE TRANSFORMERS

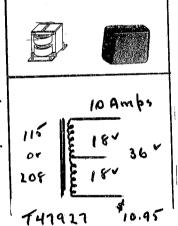
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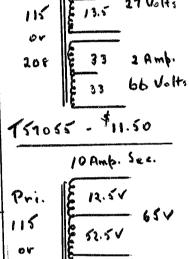
STATIC-MAGNETIC VOLTAGE REGULATING TRANSFORMERS





100 MH





52.5V 508

\$14.95 - 747926

### Sola Constant Voltage

250 MA 2.50

1.3 Amps 9.95

190 to 250 V - Inp 230 V - 2.11A - Out 60 CPS - 1 Ph. 500 VA \$14.95

HYCOR MOULDED TOROIDS 88 MH Open Rtty Open Potted

72 MH 25 MH Open 16 MH Open 25 UH assorted for only \$1.95

Miscelanious values 10

105 1160V 110 115 1160V 119 125

\$17.50

TRANSFORMER: POWER. \$2.95

Wind.	No. Turns	Wire (	Dhms d Res.	c Volts	Amps.	Freq.
Prim.	475	24E	5.5	115	.575	60-1200
HV	4750	34E	600	550-		
				0-		
				550	.050	
Fil. 1 -	28	24E	.35	6.3	0.6	
Fil. 2	28	24E	.35	6,3	0.6	
Fil. 3	22	21E	.09	5	2.0	

Triple varnish impregnation; mounting centers 1-15/16 x 2-5/16.

#### RM-52 REMOTE CONTROL for Phone Patchers



PULSE VOLTACE DIVIDER

TS-89/AP. Primarily for dividing voltages so that they may be viewed on an oscilloscope. May also be used as a means of employing various oscil-loscopes to measure video pulses in excess of 200 V in high impedance circuits. Two input circuits in series cfroults. Two Input circuits in series with different copacitances which provide two ratios and voltage ranges. Video Frequency range with voltage ratios of 100:1 and 10:1. Voltage ratios of 10:1. Accuracy ratios within + 15% of designated values, Contained in metal box 5 x4 x 10"

17

### GUARANTEED TUBES AT BIG SAVINGS

#### RADAR INDICATOR

Contains 5FP7 C.R.T. plus other circuitry



#### MILLIVAC

RM17B DC Vacuum Tube Voltmeter \$49.50

#### PRD

277A - Standing Wave Indicator \$69.50

#### SHALLCROSS

671 - Millometer .003 - .3 Scales \$37.50

DU-1 Loop

Direction finding loop and pre-amplifier (two tube) assembly. No 1800 ambiguity.

New \$24.50 Used \$17.50



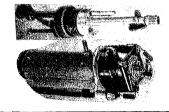
#### ALIGNMENT INDICATOR 1-210

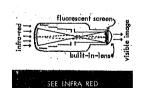
A vacuum-tube voltage Indicator which uses electron-ray tube 6E5 (VT-215) to indicate Also indicates resistance and continuity in a circuit that has a resistance less than 50,000 chms. Powered by external 7.5v and 150 volt ruction book, New condition.
Shpg wt 5 lbs. Cat. No. 306TY4.



#### 416B CAVITY

Western Electric cavity complete with 416B tube and associated cable and hardware as removed from equipment --- in gauranteed condition--- \$12.95





IP25A Tube

Infra-red image converter New \$4.95

#### **NEW ADDRESS** ARROW SALES - CHICAGO INC. 7049 W. ARCHER AVE. CHICAGO, ILL. 60638 PHONE: 586-7441

6.95 3.00 396A 400a 57037n 3.00 1.00 2040 57447A 3.00 2043 2.00 405n 5755 3.00 2044 1.00 407n 5763 1.00 1.00 408a 2051 1.00 5783 1.00 4163 2D21 1.00 6.00 58:03 10.00 417A 3.50 2326 2.00 5820 50.00 2K25 4184 12.50 2.00 1.00 2K33 95.00 420 2.00 58:42 3.50 2K39 50.00 422 5868 25.00 3022 20.00 423A 2.00 5933 4.00 3023 3.00 437.1 10.00 5960 10.00 GL451 4.00 3024 5.00 5963 • 50 "L460 10.00 3031 3.00 5965 .50 4B24 2.00 88 50110.00 5993 5.00 10.00 567 20.00 6000 15.00 4X15QA 6.00 576 6012 4.00 4X150D 6.00 583 5.00 6080 WA 4.00 4CX250F 8.00 70713 2.00 6094 6.00 4CX350F 10.00 717A1.00 6097 .75 5D21 719A 8.00 6098 2.00 5R4 1.00 723AB 6098 1.00 724A64C7W 6106 2.00 6AR6 1.00 724B 5.00 61124 1.00 2.00 NL740F 10.00 6AS7 6116 15.00 4.00 811 6B4G 4.00 6146 2.75 6BL6 25.00 813 12.00 6178 50.00 6ВМ6А 25.00 826 6186 1.25 8293 6L6GA 1.25 7.00 10.00 6322 10Y 1.00 832A 5.00 6442 15.00 833 FG 17 30.00 5.00 6510 10.00 VX34 845 10.00 8.00 10.00 6857 105 25.00 851 50,00 6858 10.00 F128 50,00 8573 50.00 6883 2.00 HF175 5.00 861 20.00 4.00 6939 5.00 872A 4.00 203A 1.00 7056 876 211 3.00 1.50 7060 1.00 212E 95.00 884 1.25 7077 3.00 2170 8.00 954 1.00 1.00 955 1.00 259B 50.00 10.60 7486 956 1.00 282A 30.00 15.00 7554 301A 1000T 90.00 10.00 8005 8.00 1625 1.00 304TL 40.00 8008 5.00 314A1626 1.00 5.00 8,00 8013 315A 1629 1.25 5.00 8014A 20.00 2050 1.00 323A 4.00 2.50 8032 1.50 336A 5643 4.00 3.00 8298 5651 .75 338A 8.00 1.00 9001 5670 1.00 339A 20.00 9002 2.00 1.00 5686 2.50 2.00 9003 5687 393A 4.00 1.00 .50 9006 5692 1.00 3.00 1.00

ID 169 C / APN 12

is a late model (designated by "C") compact display unit with 3JP1,6X4. 5-12Au7, 6AQ5, 6AS6 & 3-5726 tubes, intensity, focus and

positioning controls plus a DC motor driven switch you can use for many automatic switching functions outside an oscilloscope. This switch is equipped with 6 BNC chassis receptacles, 6 BNC cable connectors (UG 88) and 6 BNC right angles. The front panel of the scope has 5-SO 239 receptacles.

This is a RTTY enthusiasts favorite foundation for a converter with cross-line scope presentation and also the Ametuers favorite Modulation Monitor. It is small--9 x 9 x 16 only 22#. With it you get an original schem atic plus conversion data offering ba-

sic 60 cycle conversion.

Used \$12.95 New \$15.95

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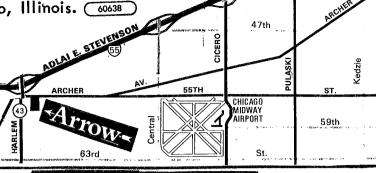
ARROW SALES - CHICAGO, INC.

7049 W. ARCHER AVENUE Chicago, Illinois. 60638

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Arrow is now conveniently located on Archer Ave. about a block from Harlem Ave., 3 blocks from the expressway, near Midway Airport, and also easily accessable by C.T.A. bus from any part of the city.

PLEASE PRINT OR TYPE CLEARLY



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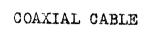
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### MAGNETRON MAGNETS

Super-power Magnet 11/4" x 4" x 6". With air-gap of 1 1/8". Pole Diameter: 3/4".

Shpg. wt. 10 lbs.





RG 8/AU (52 ohm) 15 foot patch cord with PL259 each end. New \$1.49

# SENSITIVE RELAY



BK-7. Single-Pole, Double-Throw. 4000 ohms. Sensitivity accurately adjustable by altering spring tension with pointer on an arbitrarily-calibrated scale. At "5", sensitivity is 500 microamperes (2 volts across coil) and from "5" to "40", the sensitivity decreases linearly to 1.5 ma (6 volts across coil). Fully encased, 1½" x 3%" x 1¼". Weight 6 oz. With hinged contact-inspection door and screwdriver-adjustable stationary contacts. Shpg wt 1 lb. \$125 Cat, 206RY1 .....

#### 24 VDC 6PDT RELAY

24 V DC RELAY

Struthers-Dunn 61 KXX100. 3PST. 24 v dc. Mounted on 3/8" bakelite base, 3" x 2 3/4". Normally open contacts will carry 10 amps. 75 Ohm cell. Shpp wt 1 lb. Cat. No. 106RY47... \$\phi\$ 1.95



No. 220XFX101 from Struthers Dunn. Sealed can with 20-pin ceramic base. 1 1/8" dia x

1 1/4"L, \$ Shpg 1 1b Cat. 206RY59.

CRYSTAL CAN RELAYS

Double pole double throw

Coil is rated 24 VDC but These are gauranteed to operate at 12 VDC. Removed from new equipment. 79% ea 8 for \$5



23 Pole ST

250 ohm 24 VDC coil

New \$1.95



#### LATCHING & INTERLOCKING RELAYS

Dual relay assembly consists of one 10 amp contacts 3PDT and one 10amp contacts 5PST relay. When either coil is pul-sed (24 vdc 9 ohm) that relay closes and latches and the other opens.

New \$1.95

INDUSTRIAL RELAY USERS:

We have many more relays than

we showhere, and new lots ar-

rive all the time. If you tell us

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SEALED RELAY



PLATE relay - 7500 ohm coil - DP-ST-NO. Closes as low as 25 VDC. Guardian #56276 New 79¢

Quantity price on request



MIDGET

12 VAC 60 cycle coil SPDT contacts

\$1.19

4.P.D.T. "A.C." RELAY



type 115 volt A.C, 50/60 cycle relay with 4 P.D.T. Coin silver ten amp contacts. D.C. resistance 150 ohms. Overall size 2" long x 2 15/16" wide x 2" high.

EACH \$2.25

Leach type 2069

3Pole double throw

25 Amp. contacts 24-28 VDC coil

New \$1.69



D.P.S.T. 12VDC Relay 15 Amp. contacts \$1.50

D.P.D.T. 12VDC Relay 15 Amp. contacts \$1.95

A-C RELAYS



115 VAC 60 cycle coil

Heavy duty contactor good for 20 to 30 amps. SPST

Umused \$1.79

CONTACTORS



LEACH type 7220-12

12 VOC

33 ohma

200 Amp

New \$2.50



Miniature Scaled Relay

5000 ohms S.P.D.T. Round can h x lin Standard 7 pin tube base.

SIGMA 4F-8000S

Sensitive --- 8000 ohm coil -- operates at 1.6MA Standard 5 pin tube type base and removable aluminum dust cover.

New \$2.95



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