

MODERN

electronic service dealer

THE OFFICIAL PUBLICATION OF THE CALIFORNIA STATE ELECTRONICS ASSOCIATION

VOL. 2, NO. 5

SEPTEMBER, 1962

SHORTCUTS

TO COLOR TV SERVICING . . .

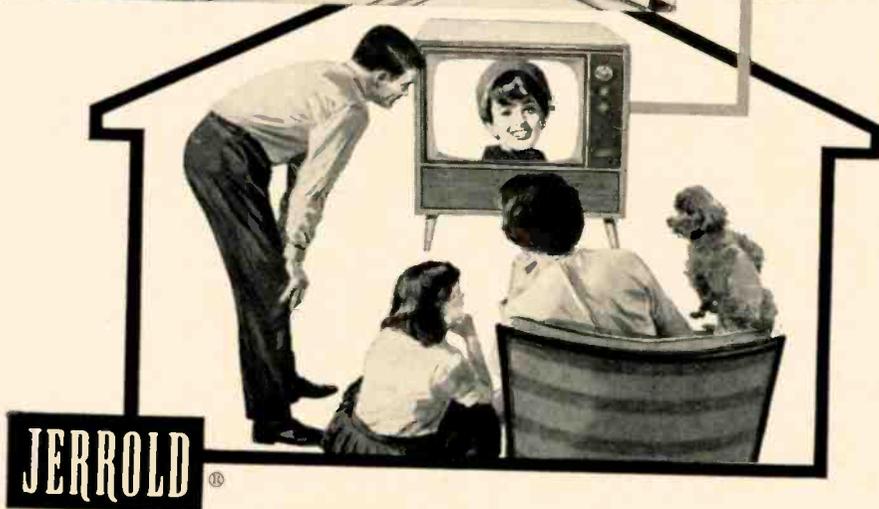
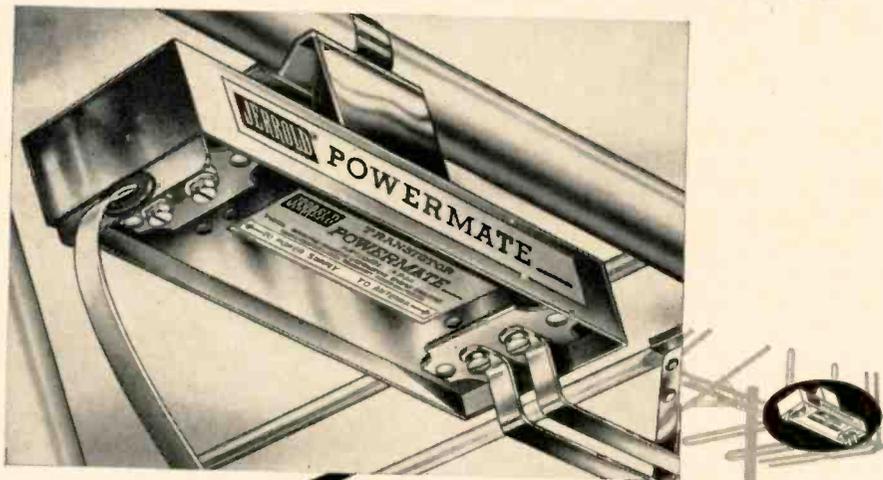
PAGE 14

1962 ZENITH

COLOR CONVERGENCE STUDY . . .

PAGE 17

Sells best because it works best!



JERROLD®

TRANSISTOR POWERMATE PREAMPLIFIER

BY FAR THE BEST antenna preamplifier in the business—that's POWERMATE! On black-and-white, and where it *really counts*—on color TV—POWERMATE's superiority shows up across the country.

The better VSWR (impedance match), flat response, ultra-high gain, special broad-band neutralizing transformer, and better power-supply filtering—all add up to an outstanding product. No polarity problems . . . no call-backs . . . transistor protected from lightning-coupled surges . . . remote a-c power supply feeds 2 sets.

Step up to POWERMATE, and step up to a tremendous new profit opportunity. See your Jerrold distributor now.

Model APM-101 \$39.95 *list, complete*

JERROLD ELECTRONICS CORPORATION

Distributor Sales Division, Dept. IDS-262, Philadelphia 32, Pa.
Jerrold Electronics (Canada) Ltd., Toronto • Export CBS International, New York 22, N. Y.

JERROLD DISTRIBUTORS

ANDREWS ELECTRONICS
1500 W. Burbank Blvd., Burbank
TH 5-3536

CAPITOL ELECTRONICS SUPPLY
17724 Van Owen, Reseda
ST 6-5870

COOK ELECTRONICS
210 E. Hardy St., Inglewood
OR 8-7644

ELECTRONIC SUPPLY INC.
2486 Third St., Riverside
OV 3-8110

BRANCH
323 W. Seventh St., San Bernardino
TU 4-4791

FIGARTS RADIO SUPPLY
6320 Commodore Sloat Dr.,
Los Angeles
WE 6-6218

HURLEY ELECTRONICS
1429 So. Sycamore Ave., Santa Ana
KI 3-9236

1501 Magnolia Ave., Long Beach
HE 6-8268

1023 So. Cleveland, Oceanside
SA 2-7694

222 W. "B" St., Ontario
YU 6-6638

501 E. Date St., Oxnard
HU 3-0133

390 S. Mt. Vernon, San Bernardino
TU 8-0721

KIESUB CORP.
311 W. Pacific Coast Hwy.
HE 6-9697

BRANCHES

2615 F Street, Bakersfield
FA 7-5533

1162 Industrial Ave., Oxnard
HU 3-9541

910 W. 11th St., San Bernardino
TU 8-6807

14511 Delano St., Van Nuys
ST 1-3930

NYSTROM BROTHERS
2426 Fourth Avenue, San Diego
BE 4-7231

WHOLESALE ELECTRONIC SUPPLY
265 So. Laurel, Ventura
MI 8-3163

BRANCHES

209 W. Cannon Perdido, Santa Barbara
WO 5-5238

311 No. McLelland St., Santa Maria
WA 5-7213

MODERN ELECTRONIC SERVICE DEALER

REDUCE INVENTORY! INCREASE SALES!

**5 ADMIRAL
ENSIGNS REPLACE
43 TUBE TYPES**

**You save space, save dollars—
make more dollar profit per sale!**

...with the Admiral ENSIGN "Big 5" as your basic tube inventory. Less stock, more sales—and you make more profit! That's sweet music! Every Admiral ENSIGN tube is of fine/precision quality manufacture. All materials and parts used in the manufacture of these tubes are *new* except for the envelopes, which prior to reuse, have been inspected and tested to the same standard as new envelopes.



Call your ADMIRAL DISTRIBUTOR tomorrow...start cutting inventory cost, pocketing new profits right away!

BE WISE...STANDARDIZE ON

ADMIRAL
ENSIGN

<p>ENSIGN 17BJP4 REPLACES</p>	<p>17ATP4 17AVP4A 17ATP4A 17BUP4 17CLP4 17AVP4 17CBP4</p>
<p>ENSIGN 21AMP4A REPLACES</p>	<p>21ACP4 21AQP4 21ACP4A 21AQP4A 21BSP4 21AMP4 21CUP4</p>
<p>ENSIGN 21CBP4A REPLACES</p>	<p>21FLP4 21ATP4 21CBP4B 21ALP4 21ATP4A 21CMP4 21ALP4A 21ATP4B 21CVP4 21ALP4B 21BAP4 21CWP4 21ANP4 21BNP4 21DNP4 21ANP4A 21BTP4 21CBP4</p>
<p>ENSIGN 24CP4A REPLACES</p>	<p>24ADP4 24ATP4 24CP4 24AVP4 24XP4 24QP4 24AVP4A</p>
<p>ENSIGN 24AEP4 REPLACES</p>	<p>24DP4A 24ANP4 24YP4 24ZP4</p>

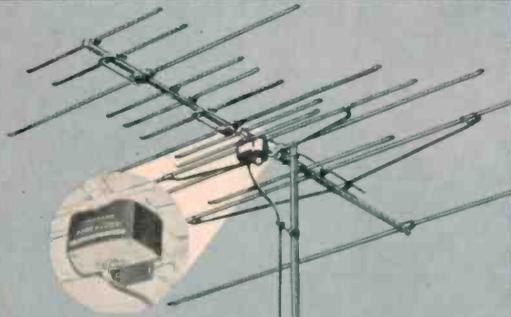
REPLACEMENT PICTURE TUBES—ALWAYS FINE/PRECISION QUALITY



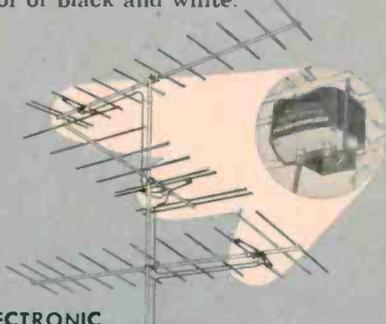
BRANDED!

THE BRAND NAME YOUR CUSTOMERS KNOW AND TRUST

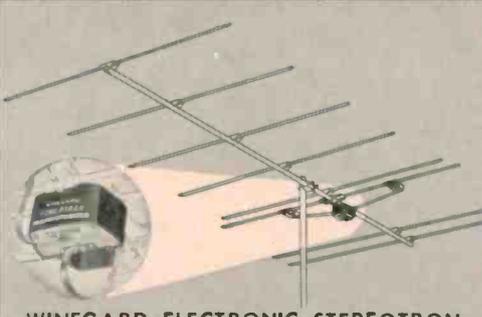
7 Winegard Electronic Products to Improve TV and FM Reception—nationally advertised month after month after month in magazines, newspapers & TV.



WINEGARD ELECTRONIC POWERTRON TV ANTENNAS—TUBE AND TRANSISTOR MODELS. World's first and most effective electronic TV antennas. More Winegard Powertrons have been installed than all other amplified TV antennas combined. Choose from 3 transistor or 3 tube models. Transistor models for FRINGE areas (nearest TV or FM station some distance away). Tube models for MIXED signal areas (locations with TV station close to set, and other stations far away). Both Powertrons come complete with built-in amplifiers, all AC power supply. Patented antennas have exclusive "Tapered T" driven elements, electro-lens director system. Six models, GOLD ANODIZED from \$74.95 to \$104.95 list. Excellent for color or black and white.

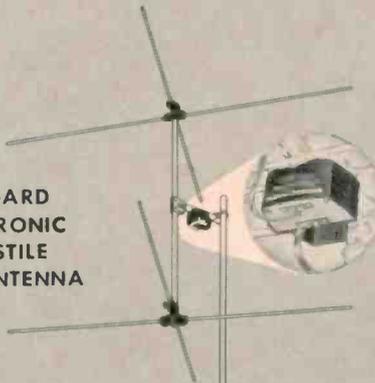


ELECTRONIC CUT-TO-CHANNEL POWERTRON YAGIS. Where you require the finest installation, motels, hotels, hospitals, institutions, deep fringe locations, there is no antenna made that compares to Powertron cut-to-channel yagis. Highest gain (28 DB), powered by transistor amplifier peaked for perfect results. Six (8 element) cut channel and broad low band models—eight (12 element) cut channel and high band models. Run up to 8 antennas from one power supply. ALL MODELS GOLD ANODIZED. Perfect for color or black and white. Write for models no's. and prices.

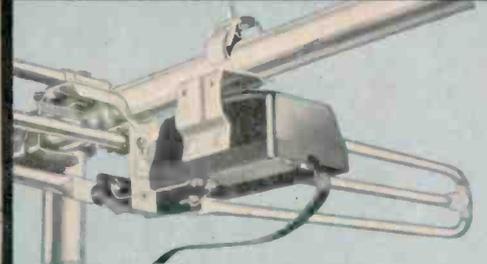


WINEGARD ELECTRONIC STEREOTRON FM ANTENNAS. For the ultimate in long distance FM and STEREO, Stereotron is world's most powerful FM antenna. Comes with power supply and built-in transistor amplifier. Guaranteed to bring in 85% of all FM stations in a 200 mile radius over normal terrain with rotor. Has minimum gain of 26 DB over folded dipole. Recommended for use where signals are from 1 to 20,000 microvolts. GOLD ANODIZED. Model PF 8 (300 ohm) or PF 8C (75 ohm), \$64.25 list.

WINEGARD ELECTRONIC TURNSTILE FM ANTENNA



Non-directional, has 16 DB gain, receives in all directions to 125 miles... no rotor needed. Has built-in transistor amplifier and comes complete with power supply. GOLD ANODIZED, built to last for years of service. Complete with two 300 ohm terminals on amplifier; one for down-lead connection to the set and one for connection to a Powertron antenna. Model PF-4 (300 ohm). \$55.80 list



WINEGARD TENNA-BOOST. Mounts on any antenna. Excellent antenna amplifier mounts on antenna, mast or wall. Has 19 DB gain. All AC power supply built-in two set coupler. Next best thing to Winegard Powertron.

Model MA-300, \$34.95 list.

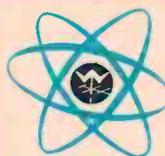


WINEGARD "BOOSTER-PACK" Single Set Amplifier or Home System Amplifier. Demonstrate right at set with unique "convincer" switch that switches from antenna only, to half power and full power. See the picture improvement with the touch of a switch. Takes only a couple of minutes to install. Has 16 DB gain on low band and 14 DB on high band. Transistorized, costs only 27c a year to operate. Model AT 6X, \$34.95.



WINEGARD "BOOSTER-COUPLER"

Signal booster and set coupler combined. Has one tube, 4 sets of no-strip terminals, on-off switch, antenna disconnect plug. Runs 1-4 sets. All AC—no hot chassis. Installs anywhere. WBC-4X, \$27.50 list.



For free technical bulletins, write today.

Winegard
ANTENNA SYSTEMS

3000 Kirkwood Street
Burlington, Iowa

Originators of Gold Anodized TV & FM antennas—makers of the World Famous Color-Cepter TV antenna.

FOR FULL DETAILS CONTACT ANY OF THE FOLLOWING DISTRIBUTORS

DUNLAP ELECTRONICS

Chico, Marysville, Sacramento, North Sacramento, Pittsburgh, Walnut Creek, Stockton, Modesto, Merced, and Fresno

NYSTROM BROTHERS CO.

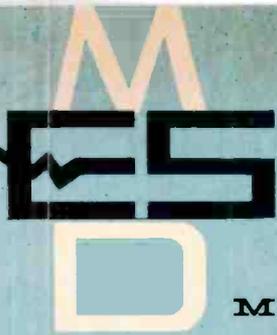
2426 Fourth Ave., San Diego, Calif. BE 4-7231

HURLEY ELECTONICS

Main Store: 1429 S. Sycamore, Santa Ana
Stores in Oxnard, Long Beach, San Bernardino, Ontario, Oceanside

RCA VICTOR DISTRIBUTING CORP.

6051 Telegraph Road, Los Angeles 22, California RA 3-6661



MODERN

electronic service dealer

STAFF:

DONALD J. MARTIN
Publisher
CSEA Press Secretary

WM. J. "BILL" QUINN
Editor

SIMON NATHANSON
Managing Editor

FRANK BURNS
Business Manager

MORRI OVSEY
Art & Cover Director

GRAYCE KENNEDY
Classified Advertising Director

CSEA EDITORIAL ADVISORY BOARD AND OFFICERS

President
CLAIRE W. LANAM
Vice-President
RALPH JOHONNOT
Secretary
KEN PRESTON
Treasurer
PAUL E. FORT, JR.

BOARD OF DIRECTORS

ZONE A
Darrell Petzwal, 1627 19th St., Sacramento, Calif.
ZONE B
Claire W. Lanam, 2466 Shattuck Ave., Berkeley, Calif.
Wesley C. Keys, 2014 No. Main St., Walnut Creek, Cal.
Ralph L. Hoy, 912 A Street, San Rafael, Calif.
ZONE C
Kenneth Preston, 4137 No. Eldorado, Stockton, Calif.
ZONE D
Russ Hamm, 4612 Saquel Dr., Saquel, Calif.
ZONE E
George Morgan, 1616 E. Tulare, Tulare, Calif.
ZONE F
Ralph Johonnot, 1817 W. Verdugo Ave., Burbank, Cal.
Ermell Meffard, 16820 Foothill Blvd., Fontana, Calif.
Don Reed, 9107 Hoxey Ave., Los Angeles, Calif.
ZONE G
Paul E. Fort, Jr., 1546 30th St., San Diego, Calif.

BOARD OF DELEGATES

Chairman
RON M. KEALEY
1657 E. Colorado St., Pasadena, Calif.
Vice-Chairman
EARL CAPP LOUGHBORO
2460 E. Main St., Ventura, Calif.
Secretary
VIRGIL GAITHER
4305 Eagle Rock Blvd., Los Angeles, Calif.
Legal Advisor
A. J. Anastasi, Commercial Bldg., San Jose, Calif.

CALIFORNIA STATE
ELECTRONICS ASSOCIATION, INC.
KEITH KIRSTEIN
Executive Director
3300 Watt Ave.
Sacramento 21, Calif.
482-0706



Modern Electronic Service Dealer is Published Monthly
at 2930 W. Imperial Hwy., Inglewood, Calif. Phone:
755-5261 by Associated Publications. Controlled circula-
tion postage paid at Los Angeles, Calif.

FEATURE ARTICLES

- 14 Shortcuts To Color Television Servicing by Wayne Lemons
- 17 A Special Report On—1962 ZENITH COLOR by Felix Hunt
- 20 CSEA Advertising Standards

DEALER NEWS

- 9 Yellow Page Fight Continues Throughout the State
- 9 Initial Dealer Program at 1963 PETS to Feature Color
- 9 Buz Bezzell Named Exec. Secretary of Zone "F"
- 10 Sacramento Group Moves Fast To Counter Unfavorable News
- 10 Board of Delegates To Meet In Fresno September 22nd
- 10 San Fernando Chapter Formed—Aird Named First President
- 11 Zone "B" o.k.'s Possible Application of Antenna Group
- 11 New UHF Station To Use CSEA Bug as Test Pattern
- 11 Fresno Dealers Turn Out in Force At Industry—B.B.B. Meet
- 12 CSEA Chapter News Round-up
- 13 CSEA San Diego News

INDUSTRY NOTES

- 26 UHF Meeting Held By CSEA Riverside-Pomona Chapters
- 26 Zone Council's Take No Action On Proposed Changes

DEPARTMENTS

- | | |
|--------------------------|-----------------------|
| 10 President's Message | 30 Classified Ads |
| 24 Legally Speaking | 27 New Products |
| 25 Know Your Board . . . | 29 Current Literature |
| Ralph Johonnot | |

LETTERS TO THE EDITOR:

Dear Don:

In reference to your list of distributors, a very grave error has been made, since most of those distributors are industrial or ham wholesaling mainly and some that we do not consider ethical in their combined dealings with the public and our profession.

CSEA cannot under any condition approve of this list as a whole. In our area although Millers Radio and TV was in, Cass Altshuler and Styles and Engelman were left out and they are also very highly thought of in dealer distribution.

Other areas have had Distributors left out and although I as well as others do know mistakes are made it is imperative that this be corrected.

We, as a group, cannot dictate whom we should trade with but we can approve of a distributor's ethics and we can categorize the type of distributor such as dealer distributor only, and so on.

You may obtain a good list from the various chapters who can obtain the opinion from their members.

DIRECTIVE—DO NOT PRINT UP a card list and under no condition are items such as the distributor list or any item relating to CSEA to be printed without our official approval, unless a note heads the article that it is contributed as an item of information and not a CSEA OFFICIAL COMMUNICATION.

Yours,
C. W. Lanam, President

Dear Claire:

The object of any magazine is to provide its readers with as much helpful information as possible. The Distributor Directory Card represents a great deal of time and effort and, we hope, will be of benefit to the dealers as a handy reference. I can assure you that no one was omitted on purpose and anyone who was I give my sincere apology. You are right . . . and I accept your directive to make sure that any further such material in the future will point out that CSEA does not endorse this material and that it is being presented as an item of information FOR GENERAL USE. Thank you for bringing this to our attention.

Dear Sir:

In a publication that is supposed to be dedicated to the Independent Service Dealer I cannot understand how you can print a complete list of Distributors in the State of California. Many of those listed are over-the-counter people and many independent dealers will not purchase from them. Isn't this a little inconsistent?

Irate Dealer

(Editors Note): In compiling a project of this nature it is impossible to determine who does and who doesn't sell over the counter. It would be just as bad to leave one off that doesn't then one that does. This is an independently produced service that we felt would be of use to the dealer and from the response we have received . . . I am sure will be. In fact, there is a possibility that this information will be reproduced on a hard backed card to make it more durable and easier to use. The only other adverse comments we have had on the card were those firms that had been omitted. I would like to point out that the California State Electronics Association does not endorse this card or the information contained on it.

DISTRIBUTOR DIRECTORY OMISSIONS AND COMMENTS

Dear Sir:

In your August issue under Distributor Directory Card, we were overlooked. Please set us up in the next printing. Thank you.

Mitch Mitchell
Dunlap Radio & TV
Supply Co.
419 Tenth Street

Dear Sir:

Please add our name to your Distributor Directory list. We enjoy your magazine very much.

R. E. Liles
Affiliated Electronics
1550 Howard St.
San Francisco, Calif.

Dear Sir:

You might add Metro Electronics TV Supply Co. to your Distributor Directory list. 5131 Mission St., San Francisco.

Dear Sir:

You have hurt our feelings. In your recent Directory Card you failed to mention our city . . . West Covina and our company West Covina Whlse. Supply.

Barney Goldman

Dear Sir:

Let me be one of many who will congratulate you on your splendid research on the Distributor Directory Card. The only comment I have is that I cannot find my good friend Lynch Electronics listed.

Charlie Silvey

Dear Sir:

The Fresno Better Business Bureau concurs wholeheartedly with your policy of reporting the facts and reporting them accurately.

In your August, 1962 edition of the Modern Electronic Service Dealer magazine you have a paragraph on Fresno. We would like to give you the facts as to what happened. The Fresno Better Business Bureau called in three of its members in the TV industry and asked them as a committee what they felt should be done to help the industry help itself. These three men decided that the Bureau should do a consumer educational program and in the meantime they would check with other members of the industry to determine what the feeling was in regard to calling a meeting of this industry over the signature of the Better Business Bureau.

At the second meeting your Association's temporary president, Frank DeLuca, also met with the BBB committee and on motion by the committee, a meeting date was set for July 24th to discuss a self regulating program.

This meeting was held with a total of 122 representatives of the industry present and after discussing a suggested code given to them as a guide by the Bureau, they voted a majority to accept it. Since then the Bureau has sent out the codes to be signed and at the present time we have the signatures of 104 service shops plus the promise of 11 more within the next day or two.

The community and the industry feel that this was a successful program and will work with the Bureau very closely in the future. During the month of July we had 49 complaints against the TV service industry. Today is the 8th of August and since the 24th of July we have not taken one complaint. That is proof enough that the industry itself wanted to do something.

Nina Martin,
Manager
Fresno B.B.B.

YELLOW PAGES

July 25, 1962

Dear Mr. Kirstein:

As I indicated to you recently, we are currently reviewing the advisability of possible changes in our tariffs and practices relating to inclusion of addresses in ads and limitations on multiple display ads.

With respect to the subject of "bait advertising", we are, as I mentioned, constantly on the alert to eliminate from our advertising copy anything which we believe would be misleading. Obviously, we are not in position to pass upon the business ethics of our advertisers.

As soon as anything crystallizes on your questions about addresses and multiple display ads, I will contact you.

Sincerely,
T. G. EDWARDS
Assistant Vice President
PACIFIC TELEPHONE
& TELEGRAPH CO.

This letter to Keith Kirstein, I felt, should be printed in order to assure everyone that the yellow page situation is moving in the right direction. CSEA has led this fight all the way and it will benefit the entire industry. No individual action could ever have carried the ball this far let alone to any conclusion. It just bares out once again what full time activity on the part of a strong Association with solid leadership can accomplish.

SAN DIEGO COMMENT FROM SEATTLE

July 23, 1962

Dear Mr. Paul E. Fort:

I am fortunate enough to receive a copy of your fine magazine and I read with great interest your article on page nine of the July issue. We seem to have the same problems in the state of Washington, but apparently not to the degree you have. I have one suggestion however that has worked for us in the Seattle area and that is to have your suppliers take a stand on these very few shops that are giving you trouble.

One system that has worked is to have your legitimate distributors be out of parts when these black sheep walk in to buy them. Thank you so much for the copy of the magazine and I feel you will do a very fine job.

Yours truly,
CHUCK BOWMAN
PARTS & SERVICE
MANAGER

cb/ha

Mr. Fort's recent article in the July issue of MESD has received numerous comments from all over the west and we are very pleased that you would take the time to add your suggestion. It certainly makes sense for a localized situation but in Southern California, especially, there are so many "over-the-counter" distributors the job may be too difficult. Anything is worth a try and we hope some of our distributors are reading.

JULY ISSUE SUCCESS

July 25, 1962

Dear Don:

Just a note. The reports are coming in from all over about what a terrific magazine this last issue was.

If you have a few extra copies of the magazine, I could sure use them, as I want to send one to each Better Business Bureau in the state.

Sincerely,
CALIFORNIA STATE ELECTRONICS
ASSOCIATION
Keith Kirstein
KKK/cd

SIGN UP

for more business



with colorful service signs from RCA

RCA signs for service technicians:

- Identify your business
- Call attention to your services
- Dress up your shop or truck
- Associate you with the prestige and customer acceptance of RCA—the most trusted name in electronics



Metal Outdoor Hanging Sign—double-faced with hanging bracket, 40" x 28". (1A1275)



Metal Wall Sign—big 40" x 28" size. (1A1276)



All-Purpose Panel Sign Kit—for wall, truck, anyplace. Contains two 40" x 14" signs. (1A1278)



Metal Flange Sign—18" x 12"—for outdoor-indoor display. (1A1277)



Decal—12½" x 8½"—for wall, window, door, or truck. (1A1279)

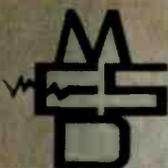
Another Way RCA Helps You in Your Business

RCA ELECTRON TUBE DIVISION, HARRISON, N.J.

All available from your Authorized RCA Tube Distributor. See him this week.



The Most Trusted Name in Electronics



DON MARTIN

EDITORIALLY SPEAKING

AN AMERICAN TUBE TESTERS OPERATORS ASSOCIATION CONVENTION?

We have just learned recently of a new Association that has been formed called the American Tube Testers Operators Association with offices in Clinton, Maryland. This Association held its first annual convention last month in Washington and the results will not be in the best interests of the Television Service profession.

Now, it seems, there is an organization dedicated indirectly to the detriment of our industry and yet there are dealers that will condemn the tube tester with a vengeance but will not devote five minutes or a few dollars to counter this type of competition. The tube tester itself, in this case, is a symbol for organizational strength. No one really believes that it can be eliminated. It should have never been allowed to get off the ground and wouldn't have if the dealer was doing a real job and there had been organized dealer strength to fight it. As it stands today the manufacturer can no longer ignore its existence but, instead, must fight to get a share of the business. All of the so-called localized boycotts in the world are not going to make much difference, at this date, but we had better all get on the ball and I mean NOW.

The real concerning thing about this recent convention was the type of manufacturers that were invited to attend, I am not going to list these manufacturers even though I have their names. I think most of us agree that the tube is here to stay BUT included in this list of those attending were: A leading West Coast ANTENNA MANUFACTURER, Two BATTERY MANUFACTURERS, A top FUSE MANUFACTURER as well as Three first line tube manufacturers and assorted Self-Test Equipment Manufacturers. From where I sit it looks as if the time is about ripe for a Television Supply Rack with a built-in tester that could place every retail outlet in the country in the electronic part distributing business for, at least, basic replacement needs and accessory items. Look out you over the counter distributors because this same idea could be used to merchandise low cost speakers, lead-in wire, TV jacks, etc. It could happen . . . it has happened in many other industries. If sales get tight the manufacturers are going to have to look for new means of distribution and the rack jobber for chain supper markets, drug outlets, etc. may find a new industry knocking on their door for help. It has been proven that people will pay more for convenience and the full mark-ups will be enjoyed by outsiders. Strength is important and numbers is the key to this strength. Now is the time to come to the aid of your bread and butter.

PAY TV IN SANTA MONICA

Well it has finally arrived in Southern California or, at least, all of the ground work has been laid for an operation to begin in September of 1963. The Pay TV operators know that their only real opposition is coming from the Service Industry and over the months they have continually denied they would have anything to do with service. It was very interesting to note that when the firm that is planning to operate in Santa Monica applied for their incorporation papers they were two firms involved. Home Entertainment

Corp. and Home Service Corp. filed their papers on the same day. According to the report we received, this new firm estimates that they will have 20,000 subscribers or a potential 40,000 viewers who "refuse to buy television sets now because of all the commercials". It is difficult for us to believe that Santa Monica has 40,000 homes without Television Sets but that is what they say. It was also interesting to note that this firm has contracted with General Telephone to install this equipment. It would seem to me that this is the time for a real strong Santa Monica Chapter of CSEA.

HOW CAN THERE BE OPPOSITION TO CSEA?

From time to time we receive comments and letters from individual dealers and small groups of dealers that breeds outright opposition to the CSEA movement. At times I even wonder what and where do these people get their information as to what this Association is trying to do. At the present time, the number one program of CSEA is "operation clean-up". This is an all out campaign to create a better image of the Service Dealer . . . ALL Service Dealers.

For example, they have been very active in the planning of an "All-interested-party" meeting this fall in Sacramento (August Issue of MESD). It required a great deal of time to set this up between such people as Helen Nelson of the State Consumer Council, Newspaper Publisher's Association, Attorney General's office, etc. and a great deal of care has been taken to make sure that only good can come from this meeting.

The problem they have had from the beginning of project "clean-up" was convincing these people that CSEA is not another industry waving the flag for themselves. Each and every member of the Association helped to convince these people, by their actions, that they were attempting to upgrade the industry and to protect the innocent public. At times it was very difficult to even get these people to listen with interest.

The first big hurdle was the Attorney General's office and it has only been in the last few months that CSEA has been able to have them on their side 100 per cent. Actually, the co-operation of the Attorney General's office has been used to further the over-all program of "project clean-up". They agree with the program and have extended their help whenever possible.

The work of CSEA with the other parties that will take part in the program this fall has been equally well handled. These groups, who knew nothing about CSEA a year ago are now very familiar with its programs. Very little time will be wasted, when this group gets together, in formalities. Everyone will know why they are there and what is to be accomplished. The results can only mean a stronger industry.

Sincere dedication and the strength of numbers has made this work possible. Without a State organization representing the industry in the best way possible none of this could have been accomplished. All the small individual groups, wherever they may be, could not have even begun this work.

Yellow Page Fight Continues Throughout The State

The State-wide fight to regulate yellow page Television Service advertising is still going strong in spite of the encouraging news of a possible new tariff now being formulated to end this battle once and for all.

Chapters throughout the State are gaining more and more cooperation from Pacific Telephone and, it is hoped, the battle will soon be over.

Although this action, at one time, might have been considered a personal competition one, the CSEA State office and these local chapters have convinced those in authority that this is solely for the benefit of the general public and in their best interest.

All that is being asked is that every firm advertising in the yellow pages be required to have an address and a place of business. It has been proven that the greatest source of customer complaints in regards to service charges have stemmed from those firms advertising only phone numbers. Sometimes the same phone number has been used in several different ads with a different firm name.

It has been suggested that any service dealer in the state that knows and has proof of irregularities should put them in writing and send them to the State office, 3300 Watt Avenue, Sacramento, Calif. This is everyone's fight, whether a member of CSEA or not, so lets send this information in as soon as possible.

Someone's face is red . . . or going to be. We noticed in the minutes of the last Board of Delegates meeting in Fresno that our good friend Lou Hall was listed as A GUEST. Lou, who has been active in CSEA for a long time, was elected as a Delegate and we reported this election in the May MESD. We'll be sure to count his smiling face at Fresno on the 23rd.

Initial Dealer Program at 1963 PETS To Feature Color TV—Today & Tomorrow

One of the most interesting programs ever produced for the service dealer industry is being planned for the 1963 Pacific Electronic Trade Show, according to Ralph Johonnot CSEA program chairman and member of the PETS Committee.

First of all, Sunday February 10th has been officially designated as "GO PETS . . . DEALER SERVICE DAY". Of course, the show will be open at any time to the dealer service industry but this big day of events will climax Western Electronic Week. A GO PETS . . . bus caravan program is being worked out whereby leading distributors all over the State will sponsor a day at PETS. Dealers will be able to sign up, with their local distributors, to ride one of the buses leaving for PETS, have a Continental Breakfast when they arrive at the Shrine Exposition Hall and then participate in the Dealer Workshop Session from 9:00 a.m. to noon before the show itself opens.

The highlights of the program are beginning to drop into shape and will be the most outstanding ever presented. Devoted to Color Television Today and Tomorrow it will begin with a presentation of a working demonstration of a new Television Tube that is only 3" thick and can be hung on the wall like a picture. Presenting this portion will be Dr. Willard Geer, inventor of Television and holder of many of the basic patents. According to Dr. Geer this picture tube will be on the market within the next five years and will revolutionize the Television Industry.

Part two of the program will bring together the national service managers of the leading manufacturers of color television sets. They will each be given twenty minutes to present and answer many of the problems that have been voiced to them by service dealers throughout the United States. There will also be a question and answer period to follow in order to allow those attending to ask about any personal experiences and problems.

Part three will be a review of the industry as it stands today. Speaking on a panel will be the Executive Secretary of the California State Electronics Association, a representative of the Los Angeles Better Business Bureau and a representative of the fraud division of the Attorney General's office. This portion of the program will be designed to inform the dealers of the program now in effect to uplift the industry. A great



BUZ BEZZELL NAMED EXEC. SECRETARY OF ZONE "F"

Mr. E. L. "Buz" Bezzell became the first Executive Secretary of Zone "F" last month when the delegates voted to accept the recommendation of the Zone Officers and establish this office.

The realization of an official Zone "F" office has been the result of a great deal of effort in trying to locate the right person to assume these duties. Buz Bezzell is well known to most CSEA members in the Zone "F" area having been a dealer himself for many years in Glendale. He was a member of the San Fernando Valley Chapter of RTA and later became the second president of the Glendale-Burbank Chapter of SRTT. He had been active in the Zone Council and a delegate to CSEA before leaving the business a few years ago.

At the present time Mr. Bezzell is in the Real Estate Business in Oakhurst, California and will be leaving this position to re-join his friends in CSEA on September 1.

deal of work has been done on "operation clean-up" and this report will show how these different segments have worked together, in recent months, to create an entire new outlook for the service industry.



PRESIDENT'S MESSAGE



Claire W. Lanam

Now is the time to push for good *STABLE* members and chapters in all large population centers.

We have accomplished much, membership is a desirable feature now and will be a much coveted requisite in the future.

Make membership in CSEA—a habit, as well as an asset not only to your business but to the state organization as well. In *unity is strength* and in *strength is power*.

In your hands lies the power to make your industry a notable factor in its profession; only if you organize and put aside all personal feelings of like or dislike and work for the betterment of CSEA.

When your industry prospers, you prosper, so, let us knit our members and groups tightly in a common cause.

This will be the year of understanding, accept and go with the ideas of others and arrive at business like decisions. Don't be a *destructive critic*, be a *constructive critic* by offering a better solution.

BUDGET

The budget is now in balance for all current expenses. This year we will pay all debts incurred during our struggles of organizing and licensing.

To do this, we must depend on the different zones and chapters doing their own regional work, referring to State aid for information or when a situation needs to be moved faster or threatens to get out of control. But remember too, many situations are a State wide problem and can be checked from State level much more easily. Let us all spend a little of our own time on this work, it

BOARD OF DELEGATES TO MEET IN FRESNO SEPTEMBER 22ND

The Board of Delegates of the California State Electronics Association have officially set their meeting date as September 22nd and 23rd at the Tow and Country Lodge in Fresno.

The Fresno Chapter of CSEA, who will act as host, have planned a get-together cocktail party the evening of the 22nd and have invited all of the delegates to attend.

This announcement was made by Mr. Ron Kealey, Chairman of the Board.

will pay you far more than one or two repair jobs.

THE UNETHICAL

This is the year we will move into the area of those whose unethical practices have brought and made a mockery of and brought into disrepute the ethical of our profession, and which has brought down reproach and anger on us from a misinformed public.

Great strides have been made, but let us tie the last knots to bind public opinion to and for our State organization—CSEA—and move out most of the robber barons and their satellites.

This can only be a continuing police action for all time, but we can make it easier. We will do work with the authorities until our industry is clean and a model to be held up for any industry to admire.

THE INCOMPETENTS

This year we start the final stages of the campaign to curb devastation wrought by incompetents meddling in an intricate profession of which they know little or nothing.

Laws are not made primarily to help a profession, but to aid an uninformed public, for their protection of health and their monies of subsistence and we must do this for them also, with the aid of many willing people and groups.

Incompetents lose the people of the State of California over \$100 million dollars a year, which is a fantastic figure, but can be proven.

This year by licensing or by self certification—which can be vouched for by reliable parties—we can move into the incompetent field and destroy this threat to our profession, as other professions have destroyed their false public image.

SAN FERNANDO CHAPTER FORMED . . . AIRD NAMED FIRST PRESIDENT

The forming of a new chapter of CSEA was announced last month when the San Fernando Valley Chapter with fifteen members were admitted to the California State Electronics Association.

Mr. Al Aird was named as the first president. The chapter meets the 1st Wednesday of every month at the Cris & Pitts B-B-Q, 13237 Victory Blvd. North Hollywood. The chapter office is at 15025 Ventura Blvd., Sherman Oaks.

SACRAMENTO GROUP

MOVES FAST TO COUNTER

UNFAVORABLE NEWS

OUT IN THE OPEN—The question of square dealing by television repair service dealers burst right into the public glare this month with announcements of Sacramento area arrests. These were from the office of Sacramento County District Attorney John M. Price. His investigators made three TV trade arrests and those charged await court action. Of course, the persons involved have no involvement with California State Electronics Association membership. For those who may possibly be unfamiliar with the cases, we point out stories were carried in *The Sacramento Bee* June 21, *The Sacramento Union* June 26 and *The Sacramento Bee* again June 26. In addition, *The Bee* of Sunday, June 24, ran a feature story on fraud fighting in the office of Atty. Gen. Stanley Mosk and the same issue's *Parade* magazine also had in its special report a prominent notice on TV gyps.

CREDIT FOR FRITZ—Bill Fritz, the manager of Sacramento Better Business Bureau deserves credit for putting much effort and intelligent strategy into the local campaign to clean up the TV service business, unfortunately given a sour reputation by a small bunch. Fritz, the newspaper reported, was in close touch with the investigators of Price's office.

CHAPTER UNITY—Chapter unity rose as a result of the publicity. For regardless of how individual TV dealers and technicians viewed the developments, in the eyes of the majority of consumers, many others in the business—though beyond any suspicion—did become suspect. So, acting as soon as deadlines would permit, the Chapter moved.

ALL MEMBERS TOGETHER—A large display ad for the Leisure TV section in *The Sacramento Bee* was ordered for Sunday, July 1, with all CSEA Chapter members listed. Darrell Petzwal, working with Bert Clinkson, Chapter ad-Public Relations consultant, arranged for the CSEA Code of Standards to appear in a slightly briefer form but hitting the points the public is interested in. It was headed "An Important Message" and bore the usual CSEA seal emblem. Thus, the advertising group of 16 was joined by the rest of the membership in timely presentation to the public of CSEA's goals and standards.

**ZONE B O.K.'S
POSSIBLE APPLICATIONS
OF ANTENNA GROUP**

At the July meeting of the Zone B council of CSEA the delegates voted to accept membership of ten or more dealers who wished to affiliate through Zone B with CSEA that were primarily interested in Antenna and Commercial Sound installations. This group anticipated forming a new association devoted to this type of business but were interested in the reaction of the delegates to a possible affiliation with CSEA.

At this time, no further action has been taken by this group to become members of CSEA but, it is felt, this situation could exist in other parts of the State and this decision to accept should be publicized.

**NEW UHF STATION
TO USE CSEA BUG
AS TEST PATTERN**

KMEX, the new UHF Station that is due to go into operation on September 15th has agreed to use the CSEA emblem as their Test Pattern before going on the air and also, possibly, at times throughout the day. This type of cooperation is extremely beneficial to the station and to CSEA and that it will help increase the acceptance of our Association by the general public.

KMEX is also attempting to set up a dealer meeting sometime in September that will be of general interest to dealers throughout the area. It will be presented by the engineering staff of the new station and will discuss the problems and technical aspects of UHF. The place has been tentatively selected as the Roger Young Auditorium in downtown Los Angeles.

**FRESNO DEALERS TURN OUT IN
FORCE AT INDUSTRY-BBB MEET**

A large majority of the Television Servicing Industry from Hanford, Coalinga, Armona, Sanger, Selma, Clovis and Fresno, eager to clean up complaints caused by a small segment of the business, adopted a Standards of Practice code recently.

122 representatives from 71 TV service companies answered the summons of the Fresno Better Business Bureau to meet with the Bureau and discuss complaints and to outline a program to help the industry operate on an ethical basis.

After the Bureau had received complaints against the industry on warranties, savings claims, estimates, and inferior service, the industry throughout Fresno County was asked to attend this meeting to discuss ways and means to keep complaints in the future at a minimum and eliminate some unethical practices within the industry.

A suggested code was outlined as to what the Bureau felt could be a good basis for operation and after spokesmen for the industry changed or deleted parts of the program, a vote was called for and the code was accepted almost unanimously. The Bureau will act as arbitrator on any complaints against individuals in the industry and will police advertising as required in the code.

The group felt that they had been maligned by the report of the Bureau of the number of complaints taken in the past. Mrs. Martin, manager of the BBB explained that there were just a few who had caused this trouble and made it necessary to call this meeting and that several complaints against a company did not constitute a derogatory file. She said that some of the complaints stemmed from a lack of knowledge on the complainants' part of knowing what was company policy and their privilege to set their charges. She asked that warranties and claims of any charges be in writing and spelled out so that any TV owner would understand.

The motion that advertising, in the future, will delete any mention of price was met with the unanimous approval of the group.

Roy Giovannoni, Chairman of the Standards of Practice Committee, moderated the meeting. G. L. Dodge and Ray B. Denham represented the Advertising Board of Review of Fresno County and the committee that helped the Bureau call this meeting were Al Roach, Ray B. Denham and John Poole, all local TV service people.

Keith Kirstein, Secretary of the California State Electronics Association, talked on the value of working with the BBB stating that BBB's throughout the State have been on the side of the TV industry in cleaning it up. He also outlined the value of forming a local association further adding that if a local organization is formed it can help out its own trouble . . . trouble that has prevailed throughout California and other States. Mr. Kirstein stated he has had the pleasure of meeting with other organizations and through working with the BBB, they have been able to have a good, clean industry.

Mrs. Martin said since she has been with the Bureau this is the first time that a majority of the TV servicemen have gotten together to talk over their gripes, do constructive thinking, and criticism and arrive at a sound working plan. She said that the Bureau will extend its help to the industry full strength in the future to help it help itself to eliminate any further yoke of governmental restrictions.

1962 REPLACEMENT TUBE CODE—EXPIRATION DATES FOR 1962

Expires	Standard*	R. C. A.	Raytheon	Sylvania	Tung-Sol
SEPT. 30	61-39	M K	1-8	H K	M W
OCT. 31	61-43	M L	1-6	H L	M Z
NOV. 30	61-48	M M	1-4	H M	N A
DEC. 31	61-52	M N	1-2	J A	N B

*STANDARD—The EIA standard four digit code number system is used by many brands. The first two digits indicate the year. The remaining two digits identify the month by referring to a week of the year included in that month. Brands using this system include: C.B.S., G.E., Philco, Westinghouse, Zenith.

CSEA Chapter News Roundup

PASADENA

PASADENA—At the present time the Pasadena Chapter is setting up a course in color servicing similar to the one developed by the Los Angeles Chapter that was such a success last year. Mr. Stan Auerback has been signed to conduct this course and it is scheduled to begin around the 17th of September. All dealers, whether members of CSEA or not, who wish to take this course should contact Mr. Virgil Gaither at CL 6-5290.

PAY T.V. has been set and o.k.'d in the Santa Monica area for September 1963. What effect it will have on our members and all other service dealers in our area is being discussed by our group. Pay TV is a real threat to our industry and a foothold in Santa Monica could be the beginning of an all out effort to spread it throughout the State. We invite all dealers in the Santa Monica area to be alert to this and to join with our group in the battle to come.

SOUTH BAY

SOUTH BAY CHAPTER—Plans for a practical course in color television servicing were discussed at the August 8th meeting of the South Bay Chapter. It is planned to start the course early in January and to continue for about 12 weeks. Discussions of colorimetry, optics and color circuitry with the bulk of the course devoted to the practical aspect of servicing. Classes will be open to members of all chapters. New members joining a chapter before the class starts will be given priority. Plans are also being made for an illustrated lecture by the technical staff of Pacific Telephone Company on the Telestar and world-wide coverage of events as they happen for the September 26th meeting. This meeting is open to anyone who wishes to attend and should be very interesting. We ask that all members plan to attend and to bring a friend.

BURBANK-GLENDALE

GLENDALE-BURBANK—Due to the illness of our guest speaker a round table discussion was held on color servicing. Announcement was made of the second series color school presented by Stan Auerback. The color school is a joint effort of the Burbank-Glendale chapter and the new San Fernando Valley Chapter. Classes start September 11 and will be held at the North Hollywood woman's club, 5629 Vineland Blvd., North Hollywood. For information regarding these classes contact Bob Seal at TH 6-0177 or Al Aird at ST 8-6794.

Our next meeting will feature Mr. Wedge Weber, Representative of Blonder-Tongue, who will give us further information on UHF. Our next meeting will be held September 13th at Genio's Restaurant, 1420 W. Olive St., Burbank.

SAN FERNANDO

SAN FERNANDO—At our last meeting we discussed joint advertising of our chapter in local papers as well as a new membership program. Our guest speakers for the evening were Mr. Irv Tjomsland and Stan Auerback who explained color set-ups. Next month we hope to have a program on UHF. On September 5th we will hold our third meeting as a new chapter of CSEA and it is the desire of our chapter to have as many new members as possible. Non-CSEA members must realize that our organization will only succeed when personalities are put aside and only the ethical and business principles of each shop can be judged. In order for a successful chapter and to obtain new members we as shop owners must realize that we are not the only ones in business. We do have competition and many good ones. Our job is to convince them that we are all working for the same goal . . . to make the Television Service Industry one of the best in the country.

SACRAMENTO

SACRAMENTO—Last month we held one of the most successful picnics we have ever attended. A committee made up of Mr. Neal, Mr. Matsumoto and Mr. Rodriguis did an outstanding job complete with a ball game and hole-in-one contest for the men . . . egg rolling, sack race, etc. for the women and a supervised play time for the children. After a full afternoon of fun no one wanted to go home so we bought some watermelons and everyone stayed till dark. As the evening progressed our wives got together and started making plans for next year which certainly accounts for the good time being had by all. The picnic was open to all members and non-members with a lot of new friends being made. Prizes were donated by Norcal Electronics, Meyer & Co. and Radio & TV Products . . . all of Sacramento.

MARIN CHAPTER

The Marin Chapter of CSEA featured a unique program last month in that the main discussion period was devoted to a panel of members who had recently attended the

World's Fair in Seattle. Many of the new things displayed there and how they will effect our industry made an extremely interesting meeting.

ACTRA CHAPTER

Last month the ACTRA Chapter of CSEA devoted the entire meeting to cleaning up old business and a general discussion of our recently adopted code of ethics and the Better Business Bureau standards. The annual ACTRA Dinner Dance has been set for Saturday night September 22nd with complete details to be issued in the Bulletin. At our September 4th meeting we will have as our guest speaker Mr. Don Johnson, District TV, Stereo and Radio Service Manager of Westinghouse. Mr. Johnson will discuss the new changes in the 1963 Westinghouse line.

LOS ANGELES

The Los Angeles Chapter of CSEA sponsored Color Course was held between May 8th and July 24th with a total enrollment of 43 students. Throughout the entire program there were never less than 38 in attendance with the interest extremely high.

Under the direction of Stan Auerback the students were furnished with an RCA Service Manual covering the latest RCA Color TV Chasis, a General Electric Booklet presenting the essentials of Colorimetry and 12 lecture outlines prefaced by Auerback. This outline included diagrams and waveforms.

At the end of the course . . . each student was presented with an 8½"x11" certificate indicating his completion. The certificate was signed by Mr. Auerback and by Hugh Wilkens as Educational Director of the L.A. Chapter.

WE ASK THE
COOPERATION OF
EACH CHAPTER
PRESIDENT TO:

1. NAME A NEWS EDITOR
2. MAKE SURE HE SENDS
IN SOME REPORT

OCTOBER DEADLINE SEPT. 15th

CSEA SAN DIEGO AREA NEWS

VOL. 1, NO. 11

SEPTEMBER, 1962

Editor: ED FORT, JR.

CSEA Men's Team Moves Out on Top Of Bowling League

CSEA Team #1 moved out on top, or at least it stands as a tie, in the Men's League with CSEA Team #2 beginning to move up. Actually only six games separates these two teams and a couple of good nights could bunch the whole league. Right now the standings are as follows:

NAME	W.	L.
C.S.E.A. #1	37	23
TEAM #10	37	23
JIM'S FALLOUT SHELTER.....	36	24
BOLDRICK'S FINE SHOES.....	34	26
TEAM #8	32	28
C.S.E.A. #2	31	29
101 MUFFLERS	29	31
S.D. SHEET METAL.....	26	34
LOOMIS ARMORED #A.....	22	38
LOOMIS ARMORED #B.....	19	41

CHAPTER OFFICES

SAN DIEGO #13
3318 Idlewild Way
274-2320

San Diego 17

NORTH COUNTY #18

114 So. Juniper
Escondido, Calif.

NEXT MEETING

San Diego #13
September 25th—8:00 P.M.

Place and program
to be announced

North County #18
Not Reported

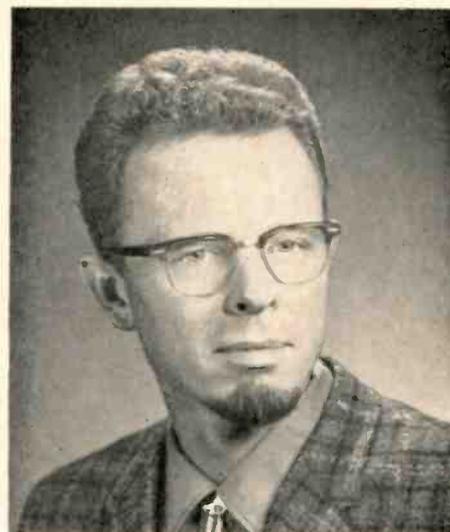
SAN DIEGO BOARD VOTES TO RUN AD IN YELLOW PAGES

The following announcement is an extremely important one to every San Diego chapter member.

The Board of Directors, at it's last meeting, voted unanimously to run a quarter page ad in the Yellow Pages of the Downtown and South County telephone directories. The ad will be of a promotional nature featuring the State Seal and emphasising the many reasons for, and advantages of, doing business with a C.S.E.A. member in their area. The ad will then refer the reader to the listing under C.S.E.A. The full cost of the quarter page ad will be borne by the chapter office but the individual listing will be billed to each participating member; just as has been done in the past. I believe last year it was less than ten

dollars for the year. You can understand now why it's so important that every member be included in the listing. This is quite a bargain. Each shop is buying about a thousand dallars worth of advertising for next to nothing. Any shop owner who has been planning on becoming a member but has just been putting it off; be sure and get your application in before October 1st.

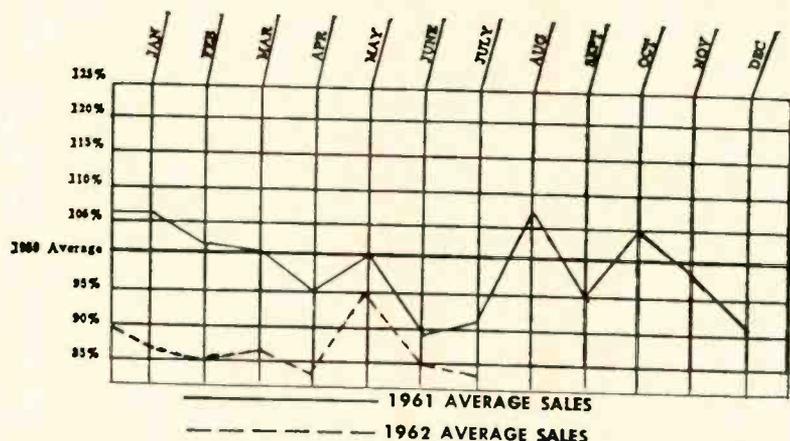
All member shops will be contacted regarding the listing. **BE SURE YOU DON'T PASS UP THIS OPPORTUNITY.**



ED FORT JR.

For the past several months Mr. Ed Fort has been writing this report for the San Diego area. At this time, we felt, it might be a good idea to know a little more about him.

At the present time Ed is the elected Zone "G" representative on the CSEA Board of Directors. He was then, in turn, elected by this Board as the new State Treasurer for the Association.



Service Sales Index of Reporting Shops in the San Diego Area. The Chart Compares 1961 and 1962 with the 1959 average to give some indication as to the business pulse in the area.

SHORTCUTS TO COLOR TV SERVICING

by

WAYNE LEMONS

Sencore Representative

Are you afraid to go into a home to service a color set? If you are, you have lots of company it seems. Far too many good technicians are passing up good money simply because they are subconsciously fearful that they will wind up with egg on their face if they try to service color. Often the reason for this can be found in the numerous theoretical articles that have appeared in recent years that made color seem to be a myriad of complex circuitry. Colorimetry, the response of the eye, phase angles, vectors, balanced modulators, I and Q demodulators, and the like all seemed so sophisticated that most of us were brain-washed into thinking that we'd never be able to service a color TV. Well, it's fine if you happen to understand all the terms mentioned above, and if you were a color TV set designer you would have to know all about these things, but for servicing these things are of minor importance. What we as technicians need is good hard, sound, practical service techniques. We are interested in getting the set "back on the air" and satisfying the customer, and we don't have to be interested in the percentages of red to green or of green to blue. It's commendable if you know that cyan is a color halfway between green and blue or that magenta is halfway between red and blue, but it isn't going to keep you from finding defective tubes, resistors or capacitors if you don't know it—and you needn't worry about the customer, she's probably never heard of cyan or magenta either!

But, you might ask, what about convergence and all that jazz? Well, here's good news for you. Unless Junior or Dad is a tinkerer, and they're not likely to be with a \$500 + color set, convergence just won't be a problem. In making color service calls, you'll probably find no more than 5% that need convergence or at least that need it bad enough to be the cause of the customer complaint. Right here though we'd like to say, don't touch any controls, however strong the urge, until you make sure that you do not have a tube defect. Just as in black and white, check the tubes first.

When you first start with color you'll find that you may not always be able to interpret the symptoms—this will come in time. But remember that with newer sets there is not more than 6 or 7 tubes that can give you color trouble. Check them all, unless you are sure of the symptom, and be sure to check them on a tube tester that can read grid-cathode contamination of up to 25 megohms or more. Even slight leakages will upset the high impedance circuits used in color sets. If you have a checker that uses only a neon leakage check then your best bet is to substitute each of the tubes.

Don't forget also to check the low and high voltage sections of the color set. A bad rectifier or damper tube can make it look like you need convergence. A defective horizontal output tube or vertical output can also cause you a variety of "color" symptoms since they supply waveforms to the convergence circuits.

But, you say, what about purity? Isn't that difficult to perform? Here again, as with convergence, you won't find this too often on a home service call. Even if you do, a degaussing (fancy for demagnetizing) coil moved about over the front of the tube is usually all that will be needed to get purity again. Newer sets have practically no purity problems because glass envelope tubes are used and unless the purity magnets or the yoke have shifted in shipment, a quick once over with the degaussing coil is like a magic wand.

Sure there will be times when you will have to converge the set or make purity adjustments. To converge you will have to have a white dot/crosshatch generator. Many good technicians have tried their hand at converging color without this instrument and to date we have heard of no one who claimed to have been successful. You will find a good many portable generators coming on the market or that are already on the market. Many of these generators are combining color bar patterns for tracing color circuits, setting up hue controls, and for demonstrating to the customer that

the set will receive color (when no color program is on the air). The important thing about convergence, even when you have to do it, is that you are not *too* critical. Make d.c. convergence on a single set of dots in the center of the screen. (All newer sets use sliding magnets on the neck of the CRT to adjust d.c. convergence.) Now make dynamic convergence using a crosshatch. Do not try to converge every line! Pick a line about 2 inches from the edge and converge at this point where it crosses another line. Do not worry about any other line but this particular one while performing that part of the dynamic convergence. You'll find that instruction books will give you the order for adjustment of each dynamic convergence control. This order is not absolutely mandatory although it might make it easier your first few times out. Actually though you'll find that in your final touch-up that you won't necessarily follow the recommended order. Go through the controls first and make a rough set up for each control, don't worry about getting it precise the first time. Now go back through the controls and make the adjustments again, this time being more critical. You'll find that if you do this you will have less trouble due to the interaction of the controls than if you try to make the adjustment critically the first time through.

For purity adjustments you'll find that the normal spot for the deflection yoke will be about one-fourth inch back from the bell of the CRT. This seems to be hard for the black and white servicer to accept and he will often try to get purity with the yoke pushed all the way forward. Once the yoke is positioned correctly the purity rings (which look something like the positioning rings on a B & W set) may or may not have to be readjusted slightly. Purity is best checked with only the red gun on, but as a final check, look at the green and blue fields also and make sure that they are one solid color.

In summary, remember that color circuits are just like other electronic circuits, made up of tubes, resistors capacitors, transformers, etc. They can be checked with voltage and resistance measurements just as in black and white servicing. Test equipment needs, in addition to instruments used for black and white are, a color bar/dot/crosshatch generator and a degaussing coil and a good wide band oscilloscope (preferably 3" for home service). Be sure to check tubes before 'fiddling' with adjustments. If you do find it necessary to make color adjustments, first make all black and white adjustments, such as, height, width, linearity, etc., before starting on color adjustments. *Never make adjustments on either r.f., i.f., or bandpass circuits unless you are ABSOLUTELY sure that this is the trouble and unless you have the necessary test equipment to do the job accurately!*



**HOW ABOUT
THAT BIG
"SIXTY-SIX"**

Because of the superior engineering staff of Calvideo Electronics Inc., they are the Nations first independent to offer you the New Universal Straight Gun Replacement Program. And how about that . . . only 66 types directly replace over 200 commonly used types. The advent of the straight gun has been one of the industries greatest advancements. The "SG" types do not use ion traps, they offer superior focus over bent gun types, they eliminate replacement confusion while they tend to increase replacement availability.

AS A BONUS FEATURE ALL CALVIDEO TUBES COME PACKAGED IN THE NEW EASY TO HANDLE "TUBE TOTER" CARTON.

AND, DON'T FORGET . . . That Calvideo is *the only* independent supplying the replacement market who utilizes *100% NEW* phosphor screens, new aluminization, new internal conductive coatings and new precision electron guns offering noticeably better focus. Just compare with any other brand and see how Calvideo quality stands out.



QUALITY + ECONOMY = PROFIT

NOW! Only 4 Picture Tubes can fill 50% of your replacement needs*



RCA 21CBP4A, 21AMP4A, 21ZP4B and 21YP4A Universal Silverama® Picture Tubes Replace 33 Industry Types

Now, four—only four RCA Universal Silverama types can take care of *half* your picture tube replacements. Think of what this means to you in terms of simplicity, economy and efficiency:

- **Fewer trips to the distributor.**
You can keep these four types in your shop, knowing that you will quickly have use for them.
- **Faster service.**
For half your picture tube replacements, you have the right tube on hand, in the shop. Saves hours of time picking up the proper tube or waiting for it to be delivered. The time saved gives you a competitive edge!
- **Picture tube replacements from your service truck.**
It's simple to carry one of each of these Universal types on your service truck so you can make half of your picture tube replacements *right on the spot*.
- **Fewer types to take care of.**
Think of the headaches and extra bookkeeping this simplification saves.

These four types are part of a growing family of RCA Universal Picture Tubes designed to help you fill the maximum number of sockets with the minimum number of types.

RCA Universal Silverama Picture Tube types are made with an all-new electron gun, the finest parts and materials and a high-quality envelope that has been thoroughly inspected, cleaned and rescreened prior to reuse.

Start now to simplify your picture tube replacement problems. See your authorized RCA Distributor this week about RCA Universal Silverama Picture Tubes.

*Based on EIA figures for the national movement of the picture tube types below.

RCA Silverama "Universal" Type	Replacing		
21CBP4A	21ALP4	21ANP4A	21CBP4B
	21ALP4A	21BTP4	
	21ALP4B	21CBP4	21CWP4
	21ANP4	21CBP4A	
	21ATP4	21BAP4	
	21ATP4A	21BNP4	
21AMP4A	21ATP4B	21CVP4	21DNP4
	21ACP4	21AMP4A	21BSP4
	21ACP4A	21AQP4	
21ZP4B	21AMP4	21AQP4A	21CUP4
	21ZP4	21ZP4A	21ZP4B
21YP4A	21YP4	21YP4A	21AFP4

AUTHORIZED RCA DISTRIBUTORS

ANDREWS ELECTRONICS

1500 W. Burbank Blvd., Burbank

TH 5-3536

WESTERN RADIO & TELEVISION SUPPLY CO. INC.

1415 India Street, San Diego

BE 9-0361

A SPECIAL STUDY REPORT ON

1962 ZENITH COLOR

by FELIX HUNT
Instructor

Radio-Television Technicians School—
California Institute for Men—Chino,
California

This information is presented through the courtesy of the Radio-Television Technicians Training School at the California Institute for Men, Chino, California.

Employers interested in hiring a technician from this school, or those interested in visiting this modern training facility, may do so by writing to Felix M. Hunt, Instructor in Electronics, California Institute for Men, P.O. Box 128, Chino, California.

The waveforms shown in this study were made with a Heathkit, Model CD-1, Color Bar & Dot Generator connected to the antenna input on a normally operating 1962 Zenith Color Chassis, Model 29JC20.

The generator video attenuator was set at two-thirds clockwise position.

The generator R. F. attenuator was set to produce minus

2.8 volts at test point C1 (video detector load) on the chassis.

Line voltage was maintained at 117 volts.

DC voltages were taken with a V.T.V.M.

All receiver controls were set for normal operation.

When troubles exist in the color circuits, the following analysis should enable the technician to quickly solve the problem.

The charts show normal wave forms, and the table shows peak to peak voltages at all test points in the color circuits in an actual working set.

The table also shows DC voltages in an actual working set with the generator output set for color bars.

The last column on the table shows the DC voltages found at the same test points when the generator output is set for shading bars.

(Continued Next Page)

TUBE	TEST POINT (PIN NO.)	PEAK TO PEAK VOLTAGES	WAVEFORM IDENTIFICATION	DC VOLTAGES ON COLOR BARS	DC VOLTAGES ON SHADING BARS
V6A-Cathode Follower	9-Grid	2 volts	A	plus 9.6 volts	plus 10 volts
V6A-Cathode Follower	8-Cathode	2 volts	A	plus 16 volts	plus 17 volts
V6B-Color Amp.	2-Grid	.8 volts	A	minus 6 volts	minus .3 volts
V6B-Color Amp.	6-Plate	10 volts	A	plus 200 volts	plus 105 volts
V13-Color Amp.	1-Grid	.3 volt	A	minus .1 volt	minus 70 volts
V13-Color Amp.	5-Plate	4 volts	B	plus 245 volts	plus 270 volts
V23-Burst Amp.	5-Plate	20 volts	C	plus 330 volts	plus 340 volts
V23-Burst Amp.	1-Grid	20 volts	D	plus .1 volt	plus .1 volt
V24A-Color Killer	7-Plate	60 volts	E	minus .25 volt	minus 70 volts
V24A-Color Killer	8-Grid	.2 volt	F	minus 10 volts	minus .6 volt
V24B,C-ACC-Killer Phase Det.	2 & 6	12 volts	G	minus 10 volts	minus .5 volt
V24B,C-ACC-Killer Phase Det.	1	12 volts	H	minus 47 volts	minus 40 volts
V24B,C-ACC-Killer Phase Det.	3	12 volts	I	plus 46 volts	plus 37 volts
V-25-AFC Phase Det.	7	12 volts	J	minus 35 volts	minus 15 volts
V25-AFC Phase Det.	5	12 volts	K	plus 36 volts	plus 15 volts
V25-AFC Phase Det.	1 & 2			plus 2.5 volts	zero volts
V26A-Reactance	9-Grid			minus .4 volt	zero volts
V26A-Reactance	1-Plate			plus 260 volts	plus 260 volts
V14-B-Y Demod.	6-Grid	4 volts	L	plus .3 volt	plus .3 volts
V14-B-Y Demod.	2-Switch			zero volts	zero volts
V14-B-Y Demod.	8-Plate	30 volts	M	plus 200 volts	plus 195 volts
V14-B-Y Demod.	9-Plate	70 volts	N	plus 190 volts	plus 165 volts
V14-B-Y Demod.	1-Switch			zero volts	zero volts
V15-B-Y Demod.	6-Grid	4 volts	L	plus .3 volts	plus .3 volts
V15-B-Y Demod.	1-Switch			zero volts	zero volts
V15-B-Y Demod.	8-Plate	47 volts	N	plus 215 volts	plus 210 volts
V15-B-Y Demod.	9-Plate	70 volts	O	plus 220 volts	plus 220 volts
V15-B-Y Demod.	2-Switch			zero volts	zero volts

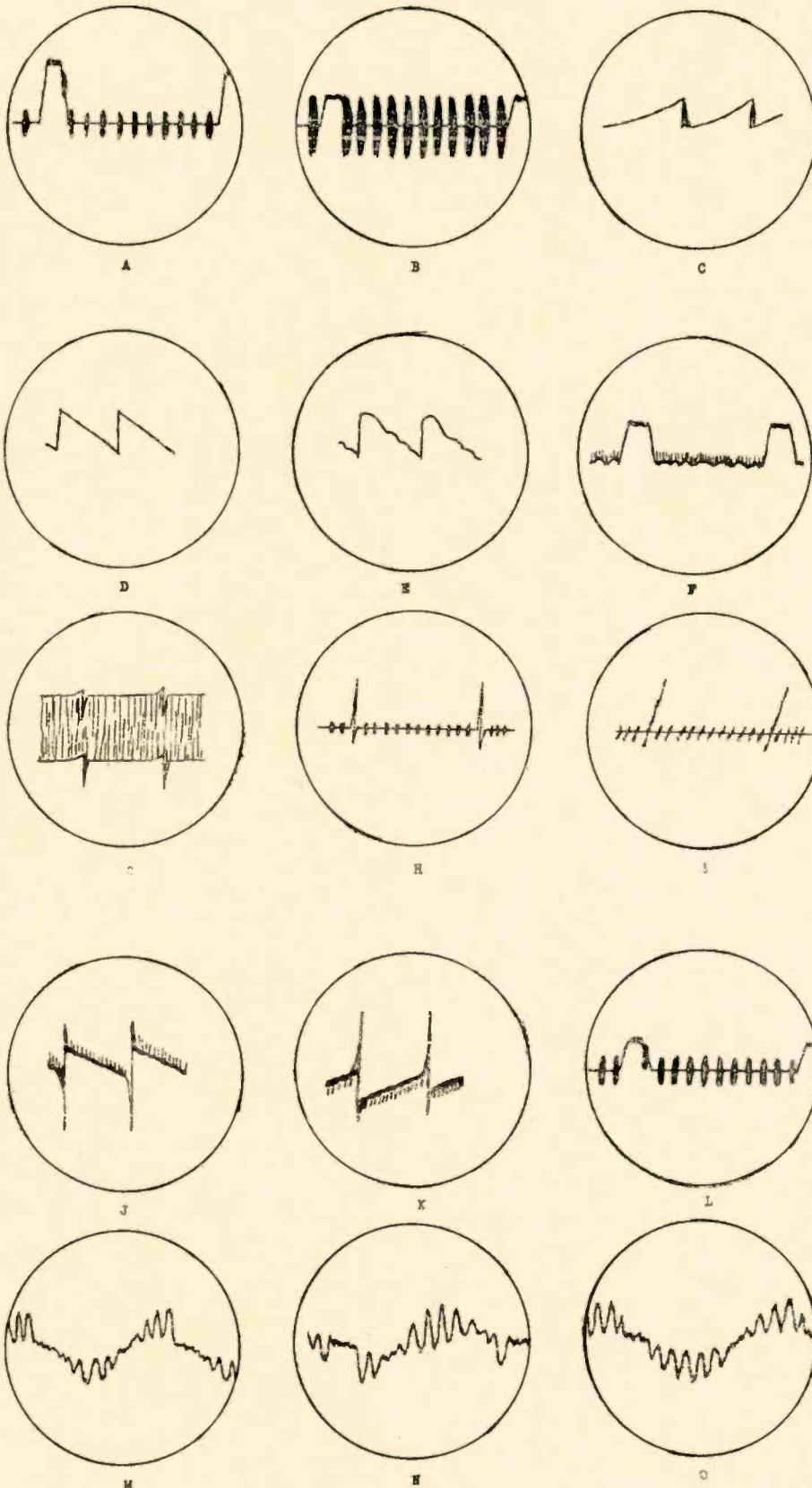
Color Block, Page 19

Scope Chart Page 18

Signal Paths Of Zenith Color Circuits →

COLOR BAR AND DOT GENERATOR

SCOPE READING



1. V6-B receives color and burst signals from picture detector. V6-B grid gets bias from V24.

2. V13 receives color signals from V6-B output. V13 will receive a negative bias voltage from V24-A only when color is not being received.

3. V14 and V15 receive color signals from the output of V13.

4. Burst amplifier V23 receives color and burst signals from V6-B output.

5. V23 receives a horizontal pulse on its control grid which permits V23 to conduct only during horizontal blanking time. Since the burst signal is sent during the horizontal blanking, time and color signals are not transmitted during horizontal blanking time, only the burst signal appears at the plate of V23.

6. receives burst signals from V23 and a 3.58 mc continuous wave signal from the B-Y injection transformer.

7. V25 receives burst signals from V23 and a 3.58 mc continuous wave signal from the R-Y injection transformer.

8. V26-A its correction from V25, then V26-A phase-controls color oscillator V26-B.

9. Color killer V24-A receives horizontal pulse on its plate to cause V24-A to conduct. When it conducts, flows from B minus to its cathode to its plate, and down through a 470K ohm resistor causes the plate of the tube to measure minus 50 volts in respect to B minus. This voltage is sent to the control grid of V13. *Notice:* When no color is being received, the burst amplifier puts no burst signal out to V24-B, makes no biasing voltage for the grid of color killer V24-A, therefore V24-A can conduct.

10. When color is being received, burst amplifier V23 does put a burst signal out to ACC detector V24-B, which does then make minus 12 volts bias for the grid of the color killer V24-A. This minus 12 volts on the control grid of V24-A keeps V24-A plate current shut off. Since no plate current flows in V24-A, its plate voltage is zero. Now there is no voltage from V24-A plate to control grid of color amplifier V13, thus permitting V13 to amplify.

11. Color oscillator V26-B feeds a continuous wave signal to V14 and V15 through the injection coil.

1962 ZENITH COLOR BLOCK

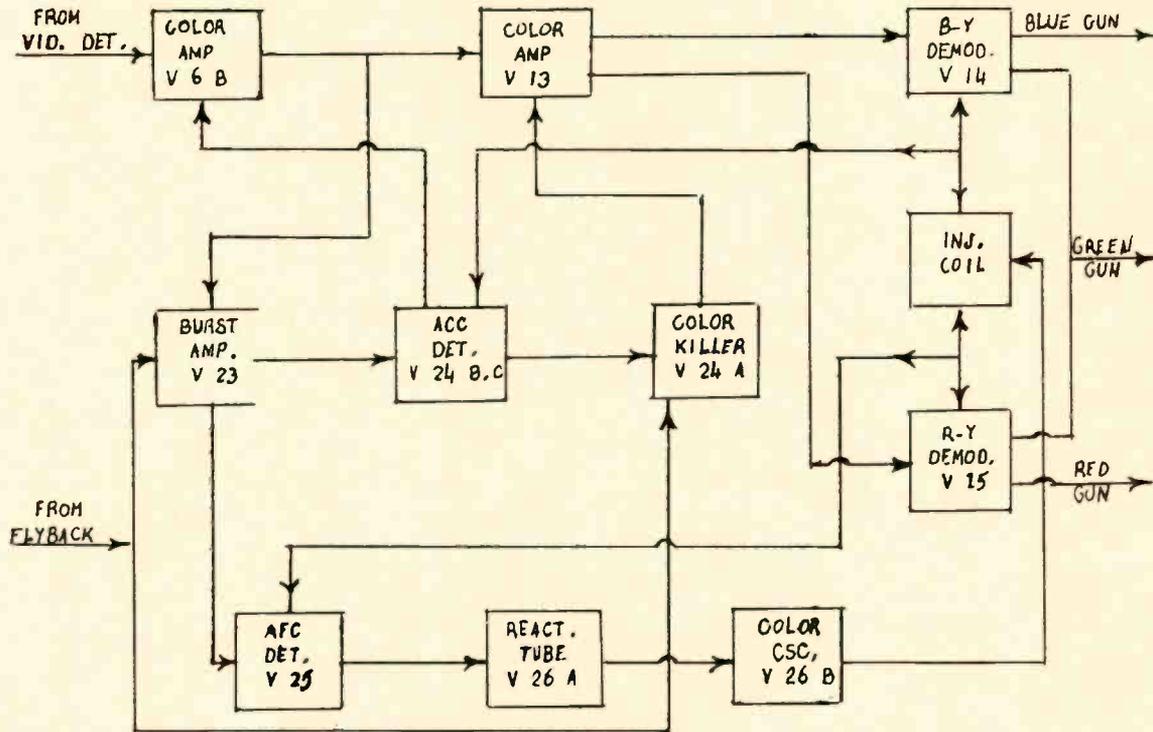
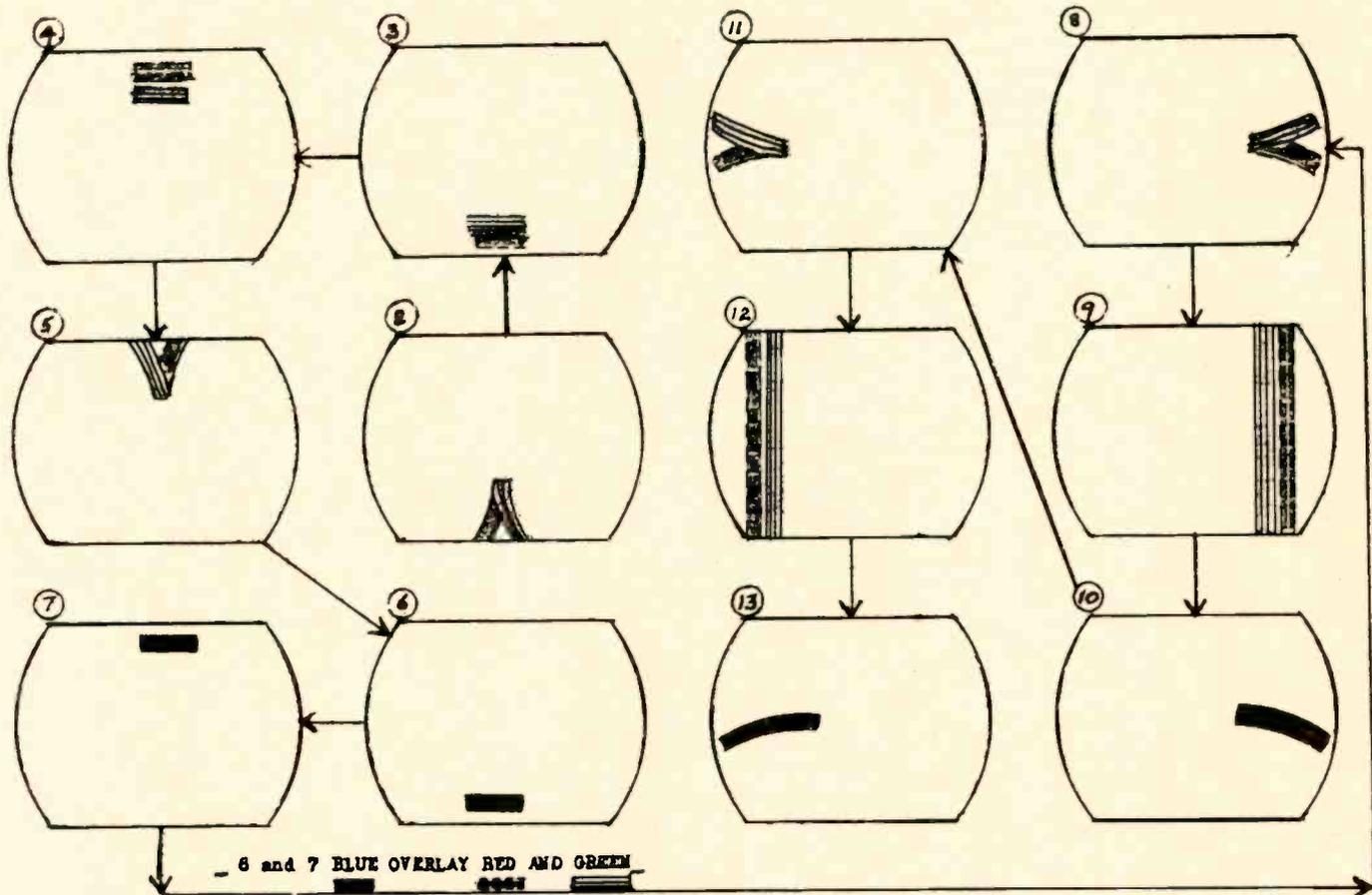


CHART SHOWS NEED FOR, SEQUENCE OF, AND FUNCTION OF, EACH ADJUSTMENT; ARRANGED ACCORDING TO LOCATION ON CONVERGENCE BOARD ASSEMBLY.



California State Electronics Association's

ADVERTISING STANDARDS

Specific examples as pertaining to advertisements for radio and/or television services which by their nature and content are misleading, untruthful, and of the type of advertisement generally considered by Better Business Bureaus and Fair Trade Commissions as "bait" or "come-on" advertisements.

1. Advertisements for radio and/or television service shall contain ALL of the following information as a protection to those persons answering the advertisement:
 - a) The Firm-name of the business enterprise as shown on the city business license and/or the State sales tax certificate.
 - b) The address at which such servicing operations are regularly conducted as evidenced by the address shown on the City Business License and/or the State sales tax certificate.
 - c) The Business-telephone number as listed by the "Information" section of the local telephone company under the name of the business operation.
2. The use of words such as, "guarantee", "guaranteed", or "No Fix-No Pay", or words of similar meaning, are permitted if the terms or qualifications are clearly and completely stated including the disclosure of:
 - a) The nature and extent of the guarantee.
 - b) The manner in which the guarantor will perform; e.g. a statement that the guarantor will repair, replace or refund.
 - c) The identity of the guarantor; e.g. clearly identifying whether the manufacturer or the retailer is the guarantor.
3. Terms such as "24 Hour", "Day and Nite", etc., shall not be used to describe the operations of the firm unless such terminology is intended to be interpreted in its literal sense and that service is actually available to the public at any time during the 24 hours of the day and night. Proof of such operation must be provided in writing.
4. The use of the words "manufacturer", "factory", "plant" or "laboratory" should not be permitted in any advertisement unless the advertiser does in fact manufacture items advertised, sells or uses actual factory parts, owns or uses a factory or plant related to the item or service advertised, or owns or uses a bonafide laboratory related to the item or service advertised. Similarly, phrases like "Direct from our factory to you" or "Direct from factory to ultimate consumer" should not be permitted unless this is a statement of fact.
5. If such terms as "repaired in your home" are included to describe any of the operations of the firm, the advertisement shall also state the rate charged in case repairs cannot be completed in the home to the satisfaction of the owner of the set.
6. If the price for a picture tube is quoted in any advertisement, the advertisement shall also indicate whether the price quoted includes installation, and shall indicate if the picture tubes offered are new picture tubes in the original cartons and of known manufacture, or whether the picture tubes are used, rebuilt, rejuvenated, picture tubes.
7. The use of the word "free" is not permitted in any advertisement unless the article or service is actually free or unless the conditions governing the offer are so pronounced and prominent as to preclude possibility of misunderstanding. This guide would also apply to such phrases as "without cost or obligations", offer of rewards, prizes, etc.
8. If an advertiser states or implies "Factory Trained", "Factory Specialist", "Journeyman Technician", "Authorized", "Licensed", "Certified", etc.—the copy should indicate that the factory of the original make or processor is involved, or if the fact be otherwise, the proper affiliation should be indicated.
9. Eliminate all "price ads" on home service calls. All price ads below a normal general cost lead to dishonest practices such as: hidden charges, padded bills, overcharges for the sale of unnecessary parts or services and hurried and incompetent workmanship.
10. Business names which are similar though not identical to established trade marks, service marks or trade names of others, should be examined carefully to assure that such names are not confusingly similar before accepting advertising containing such business names.
11. The firms doing the advertising must actually perform the repair service as advertised.

The list is endless, but the foregoing represents a fair sampling. It is impossible to frame definitions which embrace all unfair practices. There is no limit to human inventiveness in this field. Even if all known unfair practices were specifically defined and prohibited, it would be at once necessary to begin over again. It is also practically impossible to define unfair practices so that the definition will fit businesses of every sort in every part of the country. In most cases the industry involved is the best source of facts in determining when an ad is misleading and which leads to fraud.

No honest, legitimate businessman, willing to represent his product or service fairly and openly to the public should have the slightest fear of these standards.

Anti-Trust Suit Filed Against Sylvania, Others

An \$8 million dollar suit has been brought against Sylvania Electric Products under the California Cartwright Anti-Trust law by Calvideo Electronics Corp. in Compton.

In its action, Calvideo charged that Sylvania and two Southern California Distributors conspired to force them out of business through a continual program of pricing below the defendants manufacturing costs. It specifically charged that special emphasis was placed in California, home of Calvideo, where prices were below those of other areas in the nation.

This action follows closely the recent FTC investigation of Tube pricing in California. Although FTC investigators have completed their investigation no further action has been taken by the Federal Government as yet. In contacting the FTC officials it was learned that the matter is still under investigation and no decision has been reached as to further action.



ROLY POLY TOY AVAILABLE FROM GE

An opportunity to boost the concept of the independent service dealer is offered by General Electric in the form of an inflatable plastic "Roly Poly" toy.

Bearing the name "Independent TV Service Dealer," this 28-inch Roly Poly can be used as a store display and for consumer sales promotion. It is of heavy gauge white vinyl, colorfully decorated in blue-gray, red-orange and black, and has a weighted base.

The Roly Poly (ETR-3261) is available to service dealers for \$1.65, deflated and packed in individual mailing boxes. It may be obtained from authorized General Electric tube distributors.

ASCON SELECTED TO COORDINATE PETS—WEW CONVENTION

Ascon Management Corporation has been selected to handle programming and promotion of the Distributor Management Seminars, Sales Rally, Dealer Meetings and Technical Symposiums scheduled to be held February 7-8-9-10, 1963 in Los Angeles at the Shrine Exposition Hall during the Pacific Electronic Trade Show and Western Electronic Week, according to C. T. "Cap" Kieruff, President of the Association of Electronic Distributors, sponsors of the show.

"We are fortunate to obtain the service of Edward A. Altshuler, President of Ascon, and his organization," declared Kieruff. "His brilliant work in doing research and original writing of the six NEDA Aids under the direction of Gail S. Carter, Executive Vice-President of the National Electronic Distributors Association, has won the enthusiastic endorsement of the entire electronics industry.

"Altshuler will be working with Frank Eckert, who is General Convention Chairman for Western Electronic Week and Chairman of the Technical Symposiums; Ralph Johonnot, Chairman of the Dealer Service Work Shops, California State Electronic Association; Vic Zachariah, Chairman of the Distributor Management Work Shops and President of the National Electronic Distributors Association; and Charles Silvey, Executive Vice-President of Western Electronic Week and Chairman of the Salesman's Seminars.

"A prominent figure in business education, Altshuler has developed special management seminar programs for such organizations as the Electric League of Los Angeles, Magnetic Recording Industry Association, Western Electronic Manufacturers Association, Appliance Profession Association, Los Angeles Chamber of Commerce, U. S. Department of Commerce and other groups."

SPRAGUE RELEASES NEW SERVICE TECHNICIANS' AID

NORTH ADAMS, MASS.—An up-to-date revised edition of Sprague's popular Printed Circuit Replacement Manual has just come off the press, it was announced by the Sprague Products Company. Including 141 set manufacturers from Admiral to Zenith, Manual K-353 covers TV sets as well as home, auto, and portable radios manufactured from 1950 through May, 1962.

This 16-page manual lists original part numbers for each manufacturer, followed by descriptions, recommended Sprague replacements, and list prices. A total of 179 different printed circuits are included to insure exact replacement.

Manual K-353 is available free from any Sprague Distributor, or may be obtained directly from Sprague Products Company, Marshall Street, North Adams, Mass., by enclosing 10¢ to cover mailing and handling costs.

MOTOROLA RELEASES OPERATIONS SERVICE AID

CHICAGO . . . "Operation Service Aids", a service-dealer aids program, has been announced by Motorola's Consumer Products Parts and Accessories Department. Under the new plan a host of service aids will be available to the service fraternity.

Included in the new "Operation Service Aids" promotion are such diverse items as complete service uniforms in blue and grey, tube totes, identification materials and promotional materials such as back-of-set-stickers, door-knob hangers, matchbooks and other advertising devices.

sell the UHF converters proved reliable

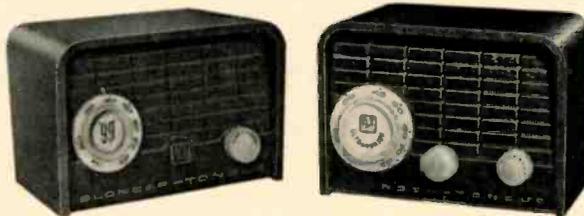
1,500,000
times

BLONDER-TONGUE ALL-CHANNEL UHF CONVERTERS

Consider—800,000 Spanish speaking people in the Los Angeles area — Add the exciting programming direct from Mexico (bullfights, jai alai, drama, etc.) on the new UHF station KMEX-TV, channel 34 — Offer the world's finest UHF converters backed by hard-hitting promotion — The result: big business for Los Angeles dealers.

**AMERICA'S
BIGGEST
SELLING
UHF
CONVERTERS**

Blonder-Tongue offers two models, the 99R for prime signal areas; the Ultraverter, BTU-2S for difficult and more distant areas. Both are all-channel models and are performance proved. Both guarantee customer satisfaction and a full profit for you.



BLONDER-TONGUE BTC 99R — all-channel UHF Converter Provides sharp, clear, TV pictures to viewers located within 15 to 20 miles radius of station KMEX. Brings in channel 34 and *all* future UHF channels in the Los Angeles area. List \$23.95.

BLONDER-TONGUE ULTRAVERTER BTU-2S—all channel UHF Converter Provides sharp UHF reception even in areas up to 50 miles from station KMEX-TV, channel 34. Booster TV signals 5 to 8db. Brings in channel 34 as well as *all* future UHF channels in Los Angeles. List \$39.95

IMPORTANT: *Protect your profits. Build customer satisfaction. Sell only all-channel converters because your customers' sets will be equipped for all future UHF stations.*

**LATCH ON
TO THIS
POWERFUL
PROMOTION**

Here's how Blonder-Tongue's successful promotion experience in every UHF market in the United States goes to work for you.

- Advertising in the Los Angeles edition of TV Guide
- newspaper & radio spot advertising
- ad mats
- window streamers
- stuffers
- publicity.



IMPORTANT — *ad mats and brochures will be available in both English and Spanish to help you sell 800,000 Spanish speaking Los Angellans.*

READY-GET SET-SELL BLONDER-TONGUE UHF CONVERTERS-CONTACT YOUR DISTRIBUTOR

engineered and manufactured by

BLONDER-TONGUE
9 Alling St., Newark, 2 N. J.

SACRAMENTO CSEA GROUP TO TIE-IN WITH LOCAL COMMUNITY TV STATION

The Sacramento CSEA Chapter has just finished putting together a co-operative advertising and public relations program with channel 6 their local Community TV Station.

According to the report the station offered the group a co-operative program for the week of September 17-22 inclusive. The program will feature a fairly long interview with one of the chapter members explaining how to have his set tuned to Channel 6 for richer TV viewing, and, how they can sell the viewer a rotor to make this possible. In addition to the interview, which will be tied-in with newspaper ads and ethics, there will be frequent spots provided by the station.

The cost of the program is a \$10 subscription to channel 6 with each new TV set he buys. Actually, this is a \$10 discount on the purchase of a new set. An additional factor is that the chapter member, when he makes a house call, will tune in Channel 6. The customer may or may not need a rotor for this

station but it is up to the dealer to determine this factor.

To help promote the idea, mailers and leaflets will be sent each participant to send out or leave with his customers. The newspaper advertising is on a co-operative bases with Dunlap Electronics and Norcal Electronics.

PAY TELEVISION TESTED IN HARTFORD

Widespread interest is expected in many branches of the industry as well as with the public and entertainment industry, in the test of Pay TV which was placed in operation in the Connecticut city last month. The Hartford project was started with some 300 subscribers using equipment designed for this type of operation. The first test of Broadcast Pay TV makes use of a "scrambler" which is controlled by a coin box at the set. Subscribers are able to watch programs of their selection without commercial interruption.

An experiment into which RKO is

reported to have put over \$10,000,000, the new concept has been under fire from some who have attempted to block its progress. An attempt to get an injunction to halt the operation as unfair competition, was unsuccessful when the courts ruled that Pay TV is a form of entertainment and that as such, it is entitled to compete for its audience. Program fare includes a large group of theatrical productions, children's educational programs, sports and top rated motion pictures. Sponsors of the project anticipate that subscribers will number between 4,000 and 5,000 within six months. No figures have yet been printed on cost of individual programs, but early reports indicate that the majority of subscribers felt that the costs were reasonable.

The industry will watch with interest to determine the effect of this concept on: The "vast wasteland" of Mr. Minow; the economic stability of competing media; the viewing habits of the American populace and the overall cost of family entertainment.



YOU TOO! ... CAN AID YOUR INDUSTRY



**COMPREHENSIVE
INSURANCE
PROGRAM**

**FULL TIME
STATE OFFICE**

**BETTER BUSINESS
SUPPLIES & AIDS**

Application For Membership

CALIFORNIA STATE ELECTRONICS ASSOCIATION

3300 Watt Avenue

Telephone 482-0706

Sacramento 21, California

Owners Name.....

State Resale Permit No.....

Business Name.....

Business Address.....

Tel. No..... City.....

CLIP OUT — MAIL IT TODAY — WE WILL CONTACT YOU



SMALL CLAIMS COURT

by ANTONY ANASTASI
CSEA Legal Council

Almost all association members periodically have to face the unpleasant task of trying to collect legitimate but long over-due bills from some of their former customers.

One practical and inexpensive procedure in respect to the foregoing is to resort to the Small Claims Court, and for those interested in such procedure, the following practical information is given:

Jurisdiction—All Justice courts and Municipal courts exercise small claims jurisdiction and while sitting in the exercise of said jurisdiction, they are known and referred to as the Small Claims Court, the present monetary limit in said court was recently increased

to \$200.00, and within such limit any action for the recovery of money may be filed.

Procedure—An action in Small claims Court is commenced by executing and filing an affidavit; the form that is used may be obtained from the clerk of any local Municipal or Justice court. The claimant may prepare it himself and deliver or mail it to the court; or on request, the Judge or Clerk will draft it for him. A filing fee of \$1.00 and a certified mailing fee of \$1.00 for each defendant to whom a copy of the affidavit is mailed are the only charges, except for possible later costs incurred in attempting to enforce the judgment.

On receipt of the affidavit, a copy is made. The Summons, printed in blank on the statutory affidavit form, is filled out by the Judge or Clerk, and the affidavit and Summons are then either sent by registered mail, or are personally served on the defendant for a slight additional charge.

The court hearing itself is quite informal, the Judge having the sole objective of dispensing speedy justice between the parties. There are no attorneys, no pleadings, and no legal rules of evidence by witnesses appearing at the hearing or at any other time, and the Judge may make an informal investigation of the controversy, either in or out of court. But at the hearings the presentation of evidence may be sharply curtailed and the proceedings are often terminated in a short space of time.

One of the important characteristics of the Small Claims Court is its prohibition against suit by any assignee of the creditor, nor, as mention above, by any attorney on said creditor's behalf. Another characteristic of the Small Claims procedure is that while the defendant has the right of appeal to the Superior Court, the plaintiff creditor has no such right of appeal, i.e., the judgment of the Small Claims Court is conclusive upon the plaintiff creditor, the reason being that the plaintiff has quite an advantage from the start by depriving the defendant of the right to a jury trial and of being able to effect service of Summons upon him by mail.

Enforcement—Although no attachment or garnishment is allowed, execution may issue on the judgment.

Further details and information on Small Claims Courts can be obtained from the Clerk of one's own Justice or Municipal court.

Thus, it can be seen that the Small Claims Court is, indeed, a speedy, inexpensive and informal method of settling or collecting small debts, and its availability as should always be kept in mind by association members.

Announcing Another First From

PICO Electronic **PARTS**

The First Independent Picture Tube

Manufacturer to Rebuild . . .

COLOR

PICTURE TUBES

We have always used the finest in equipment and materials in the production of all of our TV picture tubes. We have adapted this same method to produce rebuilt color picture tubes—at an attractive price!

CONTACT ANY PICO STORE FOR COMPLETE PRICE LIST

- Wholesale To Dealers Only
- 1 Full Year Guarantee
- Immediate Supply
- Highest Quality

LOS ANGELES
3660 W. Pico Blvd.
RE 1-2177

LYNWOOD
10906 Atlantic
NE 9-6248

EAST LOS ANGELES
5916 Whittier Blvd.
PA 1-2907

A NEW FEATURE OF MESD



RALPH JOHONOTT
CSEA VICE PRESIDENT
1961 - 1962

Our 1962 Vice President started in the Electronics Industry in San Francisco in 1936 and continued until the war years of 1939 at which time he went to Southern California and worked as an electronics technician until 1945. At Lockheed Aircraft he met his charming wife and was married soon after. He now has a daughter Kathleen 15 and Son Ralph Jr. 13, residing in Burbank.

After leaving Lockheed Ralph became a wholesale parts salesman and covered a large territory for many years. In this period he saw the demanding need for an organization of television and radio servicemen. He was instrumental in helping form a San Fernando Valley Chapter of R.T.A. From this point on Mr. Johonott became president of the

Burbank-Glendale Chapter of S.R.T.T. delegate to the newly formed C.S.E.A. and finally in 1959 became a state director.

Through his efforts a consolidation was made in Southern California of most local organizations into C.S.E.A. chapters.

He has been in business in Burbank since 1952, specializing in color T.V. sales and service.

His C.S.E.A. interests go back to the earliest meeting held by the newly elected officers after C.S.E.A. was formed and accordingly, as record show, has never missed a Delegates or Directors meeting.

Currently his duties care for the Southern California zone F sub-office as well as running his own business.

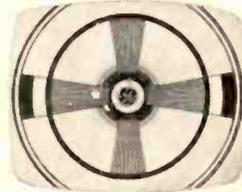
He states that the delegates and officers of this zone are very progressive and always have various projects requiring his attention which show a healthy condition within the area.

Untiring drive and the sincere belief that C.S.E.A. will soon have the Television Businessmen in the state on a sound and professional basis is his greatest desire.



Partners in Progress

Ever think of the items in a product line that aren't really products at all? Take the G-E line, for example. It only begins with the electronic components you need. It also encompasses our genuine interest in making your job easier, more profitable, more satisfying—a partnership with you in furthering the progress of the independent service dealer. Here are a few examples:



WORLD SERIES TV TUNE-UP
This preventive maintenance campaign brought measurable results last fall for more than 6,000 dealers.



PROFITABLE SERVICE MANAGEMENT COURSE

A complete business management and development program. Course includes 2 volumes, plus phonograph record and workbook.

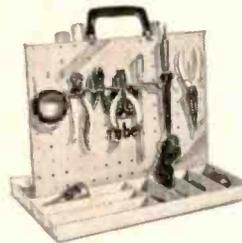
ALL-AMERICAN AWARDS

This nationwide program of public service awards brings national recognition to television service technicians who perform outstanding community service.



TECHNI-TALK

This bi-monthly publication contains information, short cuts and service helps; keeps you abreast of latest developments.



ORIGINAL G-E SERVICE AIDS

A complete line of tools and other items specially designed to help the technician in his daily work. New Service Aids are constantly being developed and tested.

PROGRESS IN SERVICE-DESIGNED PRODUCTS



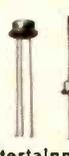
Compactrons



"SG" Picture Tubes*



Capacitors



Entertainment Semiconductors

Progress Is Our Most Important Product

GENERAL ELECTRIC

General Electric's demonstrated leadership in research, analysis and product innovation provides you with the finest electronic components—has pioneered the Service-Designed "universal" replacement concept which simplifies your purchasing, inventory and service requirements.

*All new parts in a reused envelope

UHF MEETING HELD BY CSEA RIVERSIDE-POMONA CHAPTERS

A joint technical meeting of the Pomona Valley and Riverside Chapters CSEA was held May 10, 1962 in the upstairs conference room of the Security-First National Bank, 315 No. 8th St., Colton, Calif., arranged by the two Program Chairmen, Jim Bailey and Emmett Mefford of their respective CSEA Chapters.

Guest speakers were Mr. Wedge Weber, Blonder Tongue Representative; Mr. Ken MacKenzie and Mr. Ben Strotman of the Engineering staff of UHF Channel 18 in San Bernardino.

Mr. Weber gave a very informative talk on UHF conversion problems and stressed the importance of all servicemen becoming familiar with all the concepts of UHF Reception, as UHF telecasting will increase tremendously in the near future. At the present time there is legislation before Congress to have all Television Manufacturers go to all channed production and as a result UHF telecasting will become a very important phase of our industry.

Mr. MacKenzie and Mr. Strotman speaking to the joint chapters outlined the present and future plans of Channel

18, owned by Mr. Norman Rogers. As of April 15, 1962 Channel 18 went on the air with a radiating peak power of 20,000 watts and is expected to cover the San Bernardino Valley Area, operating at the present time from 3:30 p.m. to midnight.

The latter part of May the San Bernardino Valley College is expecting to be on the air with UHF Channel 24. Mr. Weber also stated that a UHF Channel 34 in Los Angeles will probably be on the air the latter part of this year.

If these UHF stations can get and maintain good programming which will interest the viewing public, we in the Electronics Servicing Business will have a new and challenging phase of the Television industry in the Los Angeles and Valley areas.

ZONE COUNCILS TAKE NO ACTION ON PROPOSED CHANGE

A resolution that would change the basic structure of the organization of the Association was discussed at both Zone B and Zone F Council meetings last month with no formal action being taken by either group.

This resolution, prepared by Hugh Wilkins of Zone F, was briefly introduced during the June general meeting and he was instructed to prepare this proposed change in a more formal nature. Mr. Wilkins did produce this proposed change and it was sent out to all the delegates for further study, and placed on the agenda of the September 23rd meeting of the Board of Delegates.

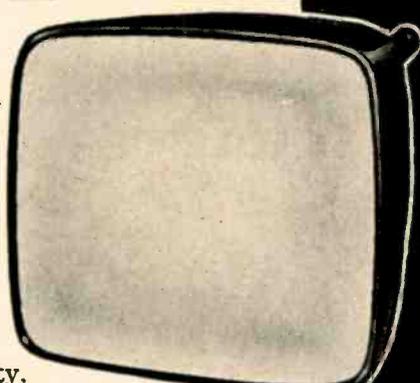
Anything of this nature will bring comments from all over the State and it is felt that a thorough discussion, by the delegates this month, will determine its value to the organization.

ALL NEW 100% SAFER*



BUY THE BRAND THAT IS
ALL-WAYS NEW! **ZENITH**

Zenith TV Picture Tubes are 100%
NEW from face plate to socket, assuring
you of the highest quality and performance
for every replacement need. Remember,
Zenith leads to long life and finest picture quality.



* AVAILABLE IN MOST POPULAR SIZES
SUES, YOUNG & BROWN, INCORPORATED

For your convenience, Zenith parts and tubes, in or out of warranty, are available from the following parts distributors.

HURLEY ELECTRONICS 1429 South Sycamore Santa Ana, California	HURLEY ELECTRONICS 1501 Magnolia Long Beach, California	HURLEY ELECTRONICS 501 East Date Street Oxnard	GROSSMAN & REYNOLDS 1900 West Valley Boulevard Alhambra, California	ANDREWS ELECTRONICS 1500 West Burbank Boulevard Burbank, California	ELECTRONIC SUPPLY CORP 2483 - 3rd Street Riverside, California
--	---	--	---	---	--

A Round-up Of Products We Feel Will Be Of Interest And Benefit To The Electronic Service Dealer In The West

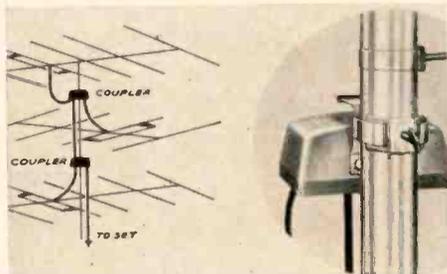


A BRAND NEW PACO . . .

test instrument in both kit and factory wired form has been announced by Mr. Sid Solomon, Sales Manager of PACO Electronics Co., Inc. The unit, a true beam current type, CRT tester and rejuvenator is the only kit of its kind that not only tests but rejuvenates all picture tubes, and checks for screen brightness under high or low line-voltage conditions. The T63 is also the only unit that will simulate the need of a booster and will also predict the probable life of a picture tube. It will test and rejuvenate all picture tubes at correct filament voltage from 1.5V to 12V . . . continuously variable—not subject to line voltage variations.

The T63 will test and rejuvenate: 110°, 114°, low G2, new 19 inch and 23 inch tubes and all color TV tubes—each gun separately. It will check for hot cathode and interelectrode leakage; leakage parts and/or shorts in gun structure at relatively high sensitivity.

Available in both kit and factory wired form the new PACO unit sells for \$44.95 (kit), \$59.95 (wired). For more information write to PACO Electronics Co., Inc. 70-31 84th Street, Glendale 27, N.Y.



THE WINEGARD COMPANY . . .

announces a new series of low-cost VHF and FM yagi antenna couplers. These 300-ohm couplers enable the dealer to make up his own combination of antennas on the same mast with a single downlead running to the TV set or amplifiers.

In many areas, yagi coupler(s) will eliminate rotor or switches, providing a

convenient, automatic antenna system. This means it is possible to couple one or more cut-channel yagis with any other VHF cut-channel, broad-band, or all-channel antenna. No elaborate "mixing networks" are necessary in this type of installation and the installer always uses one coupler less than the number of antennas being coupled.

Winegard yagi couplers are available in 12 VHF modles (each individually tuned to a single channel) and in one FM model. The FM antenna coupler makes it possible to connect an FM antenna with a TV antenna(s) on the same mast, running a single 300-ohm downlead. The FM antenna coupler can also be used as a "signal splitter" inside the house to branch the downlead to individual line to the TV and FM receivers.

All couplers are housed in a waterproof, hi-impact polystyrene case which includes a stainless steel mounting strap for easy installation on the antenna mast.

Winegard VHF yagi couplers Models CA-2 through CA-13 list at \$5.50 each; Model CA-FM at \$4.50.

Winegard Company, 3000 Kirkwood Avenue, Burlington, Iowa.



NEW PACKAGING DESIGNS . . .

assortments, roll sizes and prices for plastic electrical tapes have been announced by Minnesota Mining and Manufacturing Co. (3M), St. Paul, Minnesota.

"Scotch" brand vinyl plastic electrical tapes No. 33 and No. 88 are now being packed and shipped under a new "decimal" system—10 rolls to a carton, 10 cartons to a case. Advantages to users are easier ordering and inventory control, faster figuring and new simplicity in taking maximum discounts, 3M said.

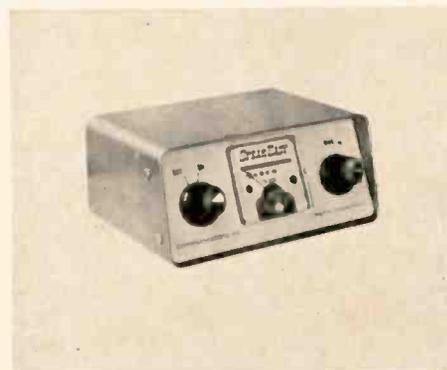
The choice of roll sizes available for "Scotch" No. 33 and No. 88 tapes has been expanded to include a new 44-foot length roll, 3/4-inch wide, to supplement the traditional 20-foot and 66-foot rolls. The middle-sized roll is expected to pro-

vide new economies by making it possible to supply a roll size to fit each job, according to 3M.

The option of ordering No. 33 tape on a compact taping dispenser at no extra cost has been added. The tape is available in either 3/4-inch by 44-foot or 66-foot rolls continue to be packed in the flat metal cans, originated with "Scotch" No. 33 tape.

The pricing structure for all tapes in the line has been adjusted for the new packaging system, with a new low price established.

For further information on tapes in the new "Com-Pak" packaging system, write Dept. W2-287, Minnesota Mining and Manufacturing Co., 2501 Hudson Road, St. Paul 19, Minnesota.



SPEAKEASY . . .

audio compressor amplifier, for mobile or base Citizens Band and Amateur radio transceivers is now available in kit form. Net price of kit is \$24.95 vs. \$34.75 wired.

The SpeakEasy kit contains all components (including a modulation meter) necessary for constructing SpeakEasy exactly the same as the production model. Detailed step-by-step instructions and actual-size photographs are provided. Kit is available for 115-12v. or 115-6-v. operation.

SpeakEasy greatly improves signal modulation and audio quality, makes the voice louder and increases copying range. The radio operator may adjust for varying conditions, and can observe his own modulation on the meter. SpeakEasy mounts easily, mobile or base.

SpeakEasy is available at local distributors and dealers or from Communications, Inc., 33 Danbury Road, Wilton, Connecticut.

SYLVANIA ELECTRIC . . .

Products Inc. has begun production of a new dual purpose nine-pin miniature receiving tube for television receiver applications.

Designated 6KD8, the tube has a sharp cutoff pentode and medium mu

(Continued next page)

NEW PRODUCTS

(Continued)

triode. The pentode and triode sections are respectively intended for horizontal oscillator and reactance tube applications in television receivers.

The tube features a low heater power of 2.5 watts that permits lower sublimation and higher reliability.



A FAST PORTABLE . . .

and inexpensive instrument for testing for shorted turns or continuity on any air core coil has been developed by the Metro-Tel Division of The Grow Corporation of Plainview, N.Y. and Detroit.

Listing for only \$39.95, it is said to be the lowest priced shorted turn indicator on the market and comparable to instruments selling at four times its cost.

The indicator has wide application in laboratories, production lines and radio and television repair centers and provides a rapid checkout of doubtful coils by engineers, radio amateurs, experimenters and hobbyists.

Any air core coil is simply dropped over the mandrel on the face of the instrument and an instant reading obtained from the large-scale square-faced meter. One shorted turn of wire as small as #10 will produce a deflection of the needle.

Continuity checks can be made equally rapidly by merely touching the two ends or the coil together. A built-in jack permits an oscilloscope to be plugged in to aid in testing.

Measuring only $6\frac{3}{4} \times 5\frac{1}{4} \times 2\frac{3}{4}$, the indicator is fully transistorized and weighs but $2\frac{1}{4}$ lbs. including 4 flashlight batteries with an indicated life of 600 hours. A specially-designed aluminum handle also supports the case at an angle for easier reading.

There is no danger to the operator from high-voltage shock nor of damage

to the coil under test.

The Metro-Tel Shorted Turn Indicator employs a peak turned oscillator whose LC network includes an iron core coil. This core is extended to form the mandrel of the indicator. Shorted turns or heavy leakage current from the coil under test reduces the "Q" of the oscillator circuit, which in turn reduces or stops completely the oscillations that activate the meter.

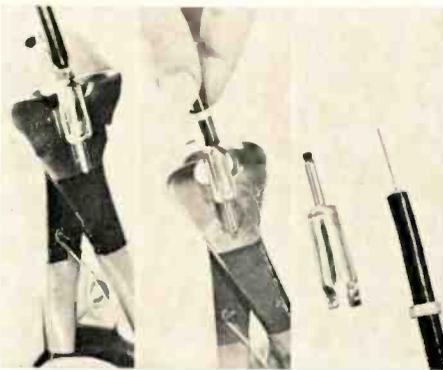


PRECISION APPARATUS . . .

has introduced a new concept in color TV service equipment with their new Model E150.

A Color Bar, White Dot Generator, (crystal controlled and voltage regulated), it offers the serviceman the ultimate in ease of operation with one simple cable connection to antenna inputs of receiver under test and only three front panel controls. It combines the facilities to test and adjust the color phasing, matrixing, linearity and convergence circuits in all color TV receivers.

Priced at only \$189.95 (dealer net), the PRECISION Model E150 is the most stable color bar, white dot generator on the market. It is housed in a blue-grey, shielded cabinet and is furnished complete with output cables and comprehensive technical manual.



SOLDERLESS AUTO-TYPE . . .

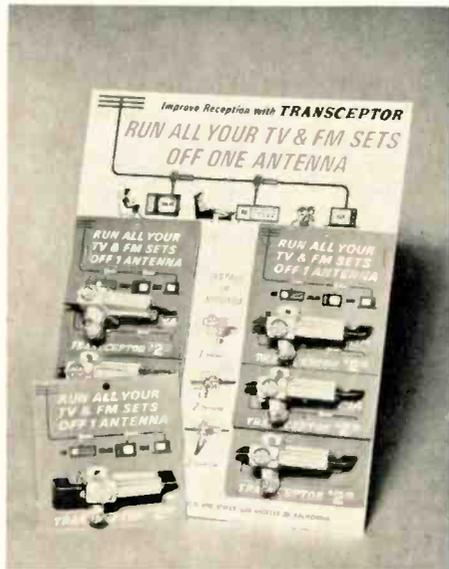
plugs, a new, rugged cable attachment for master antenna and other electronic systems, have been introduced by Blon-

The manufacturer described these der-Tongue Laboratories, Inc., it was

announced today.

durable new plugs as a major advance over conventional methods of co-axial cable attachment. When attaching, there is absolutely no need for soldering—as the connector unit simply slides onto the cable and is held permanently with a crimping ring. In the crimping process, small teeth inside the connector bite into the cable and complete the connection.

The task of wire stripping for the attachment is also reduced to an easy operation, enabling an entire connection to be made in a matter of seconds, it was noted.



A NEW HOUSEHOLD TV/FM . . .

set coupler that anyone can install in seconds is now available from AEROGAP. The rugged, foolproof unit can be used to connect any number of additional sets to an existing antenna line. Connection can be indoor or outdoor.

Transceptor snaps around the line without tools—no stripping, splicing, soldering. With electro-magnetic operation, the main antenna line is not cut. Since loss due to placement on the line is only $\frac{1}{2}$ db for low-frequency channels, $\frac{1}{4}$ db for high, more signal is available for transmission to the additional sets.

Electrical qualities between main line and tap line are automatically matched. TRANSCCEPTOR provides isolation factor of 12 db between final set and any auxiliary sets on the line (24 db isolation between auxiliary sets). Thus there is little, if any, interference between sets, regardless of how many are operating.

Useful for any combination of black-&white TV, FM and stereo FM, TRANSCCEPTOR will sell for \$2.98. From AEROGAP, 1680 No. Vine St., Los Angeles 28, California.

CURRENT LITERATURE AVAILABLE

FROM ROBINS . . .

A new, 2-color 16-page catalog, showing the complete Robins line of record and tape accessories and replacement parts, industrial products and fiberglass filters for air conditioners and heating systems has been announced by Robins Industries Corp., Flushing 56, N. Y.

The latest catalog, catalog #16, provides thorough descriptions, illustrations and prices of hundreds of items useful to audiophiles, service technicians and industrialists. Over 45 new products introduced by Robins this past year are pinpointed as "NEW" to aid dealers. Among the new items shown are: Gibson Girl Stereo 4 Tape Splicers, Disk-Whisk Kit, Robins M/M Tape Head Stereo Conversion Kits, Tele-Tape Inductor Telephone Pick-Up Coil with Beeper, Rob-O-Stat Recording Cleaning Kit, U-Cut-It Air Conditioner Filters, Equipment Covers for Test Equipment and Audio Components, Hook-Up-Wire and a variety of In-Store Displays.

The attractive 8½x11" catalog is available to the trade at no cost.

FROM DAYSTROM . . .

New Technical Data Sheet on Daystrom 301 Series Squaretrim® subminiature trimming potentiometers provides complete specifications covering these tiny ½" square adjustable potentiometers. With a range of 10 ohms to 65 kilohms, operating temperature range of 55 to 150°C, a power rating of 1 watt in still air (i.e., without the use of a heat sink), and meeting or exceeding all applicable MIL specs, the bottom-pin potentiometers in the Daystrom Squaretrim 301 Series are used for the delicate adjustment of computer, control, telemetering, missile, and other critical military and industrial electronic circuits.

In addition to actual-size photographs, the technical data sheet contains detailed electrical, mechanical, and environmental specifications on the 301 Series. Modification possibilities are also shown. Complete engineering drawings, power rating curve, and circuit diagram round out this comprehensive presentation.

Copies of the Squaretrim 301 Series Technical Data Sheet may be obtained by writing Daystrom, Incorporated, Potentiometer Division, Archbald, Pa.



FROM BLONDER-TONGUE . . .

A DO-IT-YOURSELF SLIDE RULE from Blonder-Tongue Laboratories, Inc. offers a decibel to voltage times conversion rule on one side and a calculator of distribution system losses on the other. Original sheet can be folded and stapled into the finished slide rule, as shown above, in a few minutes. Available free by writing to Blonder-Tongue at 9 Alling Street, Newark 2, N.J.

FROM BENJAMIN . . .

A new 6-page consumer catalog covering Miracord Models 10 and 10H and accessories is now available, according to the announcement from Benjamin Electronic Sound Corp.

The catalog discusses the Miracord in detail, and explains the reasons behind the turntable platter, hysteresis and induction motors, and the tone arm. The catalog also presents and answers questions most often asked by consumers about the Miracord.

Miracord dealer aids in other support of the new stepped-up advertising and promotion program are now in preparation, and will be announced as completed. Included are window streamers, envelope stuffers and inquiry referral follow-up post cards for dealers.

Miracord dealers may obtain quantities of the new catalogs from their Miracord sales representatives or by writing to Benjamin Electronic Sound Corp. directly.

FROM GENERAL ELECTRIC . .

A value-analysis outline of the benefits of ceramic planar receiving tubes now is available from the General Electric Company. As part of a company-wide program accenting value, the eight-page booklet features a frequency spectrum analysis ranging from 1 cps to 10 kmc. Typical performance curves and life test data are given. Other factors in the analysis of 13 tube types include microminiature size and weight, gain vs. noise, cots, temperature tolerance, and radiation resistance. The booklet (ETD-2998) may be obtained from the General Electric Receiving Tube Department, Owensboro, Kentucky.

FROM STANCOR

A new Transformer and Coil Replacement Guide for auto radios has just been published by Stancor Electronics, Inc.

Almost 60 different brands and manufacturers of radios are listed in the Guide. In addition to listings by radio model or chassis, each model or chassis is cross-referenced to the manufacturer and year of auto usage. Separate cross-reference tables for each manufacturer list the equivalent Stancor part number for every manufacturer's part.

The Stancor Auto Radio Transformer and Coil Replacement Guide is available without charge from any Stancor Distributor or by writing directly to Stancor Electronics, Inc., 3501 Addison Street, Chicago 18, Illinois.

FROM COOKE . . .

A four-page illustrated folder describing its new COJAX Model 22B, a miniaturized, shielded switching device for entering coaxial or shielded transmission lines. The standard 19" (A) panel will accommodate 22 COJAX switches. Inserting a patch cord in the COJAX automatically interrupts the normal circuit, routing the signal into the patch cord circuit. Dimensions and performance characteristics are illustrated. Cooke Engineering Co., 735 North St. Asaph Street, Alexandria, Va.

COURT UPHOLDS K.C. REPAIR LICENSE LAW

Last month the Courts ruled that an ordinance to license TV and radio service dealers and repairmen was "legal and valid in all respects" and within the city's power to enact. This ruling may set a standard for future such contests anywhere in the U.S. and its effect is of great interest and importance to everyone in the industry. The following is a reprint of the article

as it appeared in the Kansas City papers:

KANSAS CITY, Mo.—Jackson County Circuit Judge Harry A. Hall has ruled that the Kansas City ordinance for licensing television and radio service dealers and repairmen is "legal and valid in all respects" and within the city's power to enact.

The decree came in a suit filed by 13 service dealers, five part-time, self-em-

ployed servicemen and three employees of a service dealer, who sought to have the ordinance declared unconstitutional and void. A two-day trial was held last November.

Warren S. Earhart, attorney for the plaintiffs, said he intended to move for a new trial and that, if the motion was not sustained, he would appeal to the State Supreme Court.

Judge Hall wrote in his decision: "The city has the fundamental right and duty to enact ordinances for the public welfare and to protect the public health, morals and safety of its citizens. It is only when an ordinance has no real or substantial relation to these objects that it can be declared void by the courts.

"The evidence shows that the repair and servicing of radio and television equipment require technical knowledge and special skill and, in general, come within the jurisdiction of the public authority to license and supervise in the interest of the public welfare."

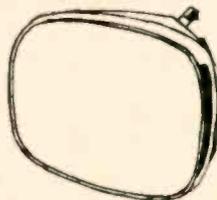
"While the ordinance does not include the servicing and repair of all electrical appliances, and, in this respect, constitutes a special law," Judge Hall pointed out. "It is based upon a sound classification, and no similar occupation has been omitted, the omission of which would render the ordinance unreasonable and arbitrary."

He further noted that "an almost identical ordinance enacted by the City of Detroit has recently been upheld by the Michigan Supreme Court."

PICTURE TUBE SAVINGS

PICO Electronic PARTS

WHOLESALE ONLY!
DIRECT MANUFACTURER TO
THE DEALER ON
TOP QUALITY
FIRST LINE RE-BUILT TUBES
ALL SIZES — ONE YEAR GUARANTEE



LOS ANGELES
3660 W. Pico Blvd.
RE 1-2177

LYNWOOD
10906 Atlantic
NE 9-6248

EAST LOS ANGELES
5916 Whittier Blvd.
PA 1-2907



CLASSIFIED ADS

BUY, SELL, TRADE, HIRE HERE

T. V. — RECORDS SALES AND SERVICE

COMPLETELY EQUIPPED
IN FAST GROWING
COMMUNITY OF 20,000
San Bernardino County
\$70,000 Gross—
ESTAB. 8 YEARS
\$6000. Equipment and fixtures
plus inventory.
Write Box 15Z995, 4041 Marlton
Ave., Los Angeles 8, Calif.

WESTERN T. V. TUNERS

VHF Rebuilt\$9.95
UHF Combo\$17.50
Broken or mutilated MAJOR
parts are extra at net price.
3040 West Sunset Blvd.,
Los Angeles 26, Calif.
NO 2-1397

FOR SALE EQUIPMENT

TV TUNERS

Rebuilt or Exchanged
\$9.95 + Low Net
For Major Broken Parts
FAST GUARANTEED SERVICE
MOST TUNERS SHIPPED
SAME DAY RECEIVED
Send Tuners with all parts to:
VALLEY TV TUNER
SERVICE
18550 Parthenia St.
Northridge, Calif.
Mailing—PO Box 675
Phone 349-5091

USE
YOUR
CLASSIFIED
ADS

POSITIONS OFFERED

USED—TV'S AS IS

WHOLESALE TO
DEALERS

100's OF SETS TO CHOOSE
FROM
LOW SHIPPING COSTS
ANYWHERE
TV BROKERS
4920 W. PICO, LA. 19, Calif.
WE 1-6622

BUSINESS OPPORTUNITIES

ELECTRONICS SALES & Service Busi-
ness desiring to sell for net inventory
... We have other interests. Good
location, excellent recreational and
educational surrounds. Ideal for ski,
fishing or hunting enthusiasts. Blue
skies, clear air! Immediate answer re-
quested. ESCO, Box 588, Mt. Shasta,
Calif.

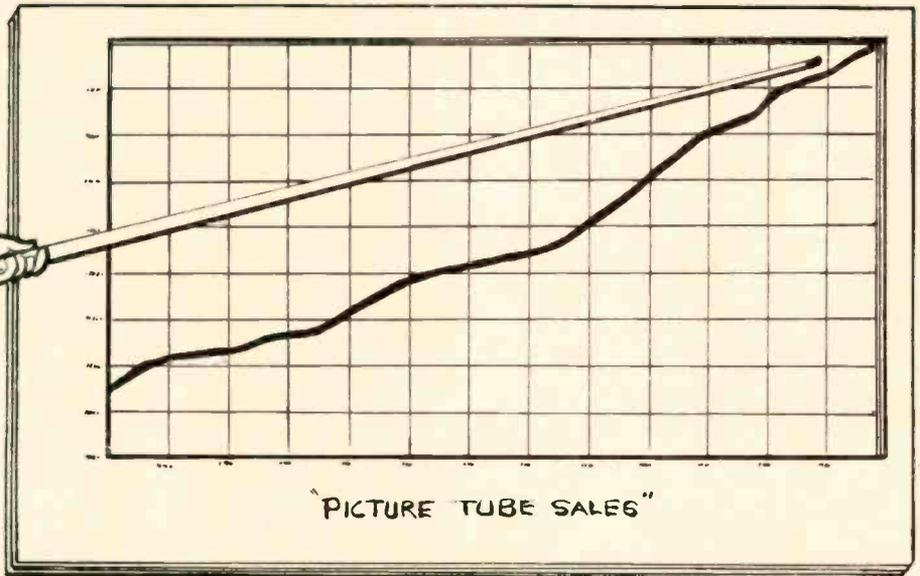
HOW TO USE WANT AD PAGE

TO PLACE AN AD

BY PHONE: in Los Angeles call AXminster 2-0287. (This is the number of the Classified Dept. only) ask for GRAYCE KENNEDY.
IN PERSON: Come to 4041 Marlton Ave. in the Crenshaw Shopping Center, next to Barker's. (This Address is for the Classified Dept. only.)
BY MAIL: Send your ad to QUINN'S Classified Dept., 4041 Marlton Ave., Los Angeles 8, Calif.

RATES

95¢ PER LINE, one time. MINIMUM 5 lines.
BOX NO.: Add 50¢ service charge, and allow 2 lines for reply address.
RE-RUNS: 2nd and 3rd times, less 10% each, 4th and thereafter less 15% each. Some copy.
HEADLINES, ETC.: Large headlines, box borders and 2-col. ads available at modest charge.
"POSITION WANTED": Less 15%, payable in advance.



YOU DID IT!

Yes, it was you, the Service Dealers of America, who made Dumont A.B.D. Picture Tubes one of the four largest selling major brands in the nation . . . and, Dumont A.B.D. is growing at a faster rate than our nearest competitor. Our sincerest thanks to you all.

WHY YOU DID IT . . . MORE ADVANTAGES THAN ANY OTHER TUBE

<p>DUMONT'S EXCLUSIVE 2 YR. WARRANTY PLAN</p> <p>makes a captive customer for you who will trade with you exclusively and longer for each and every service call they require.</p>	<p>UNIVERSAL STRAIGHT GUN PROGRAM</p> <p>with just 66 Dumont A.B.D. straight gun types, you can replace over 200 commonly used types. SG types do not use ion traps, and eliminates replacement confusion while they increase availability.</p>	<p>PRICED TO MAKE YOU MORE PROFIT</p> <p>ask your distributor to compare and you will see why Dumont A.B.D. is the most competitively priced major brand on the market. Dumont A.B.D. is unsurpassed in quality, unsurpassed in price.</p>	<p>NEW POCKET SIZED DEALER PRICE LIST</p> <p>the new pocket price sheets are available at your distributor now. They show the complete list of tubes replaced by each SG type. A handy reference to carry at all times.</p>
---	--	---	--

AS A BONUS FEATURE ALL TUBES COME PACKAGED IN THE NEW EASY TO HANDLE "TUBE TOTER" CARTON.

*A brand that means quality to every American,
and for the dealer, the Profit Line for the "Sixtys"*

DUMONT

TELEVISION PICTURE TUBES
RECEIVING TUBES

Don't Compromise **INSTALL THE BEST!**

INSIST ON

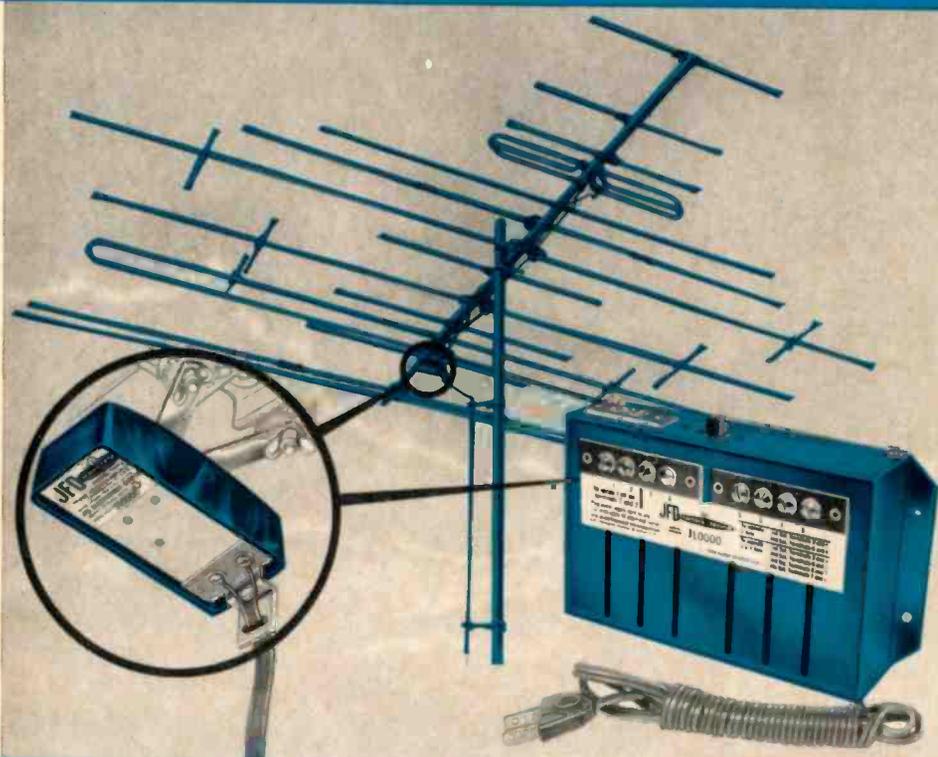
JFD



transis-tenna[®]

REGISTERED TRADE MARK

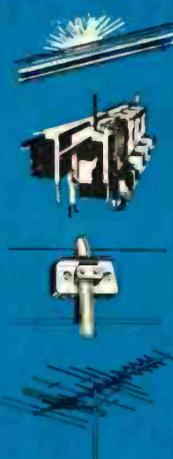
ELECTRONIC TV ANTENNA-AMPLIFIER-DISTRIBUTION SYSTEM



and be **SURE** of
MAXIMUM gain
and **HIGHEST**
signal-to-noise
ratio—in black
and white or color
on 1, 2, 3 or 4 Sets!

WHY QUALITY-CONSCIOUS, PERFORMANCE-CONSCIOUS, PROFIT-CONSCIOUS SERVICE DEALERS ARE SWITCHING TO THE JFD TRANSIS-TENNA

- PADT transistor circuitry provides higher gain, and superior saturation level and cross-modulation index characteristics. Up to 18 db gain on channels 2 to 6—15 db on channels 7 to 13 and 13 db on FM (gain above antenna). Proof of this superiority is the fact that competitive amplifier makers are switching to the same type PADT transistor.
- JFD amplifier is mounted directly on antenna terminals—the point of highest signal-to-noise ratio—the one and only right place. Result more clean signal on every VHF channel to each set in use—plus brilliant STEREO FM.
- Only the pure amplified TV signal gets through. "No picture tear-out" by unwanted amplified signals in the critical 130-160 mc frequency range. Specially designed circuit also eliminates interference from amateur, citizen's band, fire, police, aircraft and other commercial services.
- Linear frequency response... excellent impedance match... low VSWR at input and output (under 1.4 across VHF spectrum)—assures fidelity color.



- AAA* Gold Bond Alodized aluminum keeps JFD Transis-Tennas looking like new and working like new. This golden iridescent finish beautifies the antenna—protects it from corrosion or discoloration. And the electrically conductive coating will never flake, peel or chip—actually heals itself after damage. Conforms with requirements of MIL-C-5541 and MIL-S-5002 government specs for satellites and missiles. All at no extra cost to you. (*Attractive, Anti-Corrosive, Alodine-treated)
 - Includes 300 ohm connectors for multi-set operation—provides up to four different locations where set can be plugged in.
 - Only JFD provides you with the widest selection of electronic Transis-Tenna antenna-amplifier-distribution systems for every location. Prices range from \$39.95 to \$76.95, retail, including antenna and amplifier system.
- Call your JFD distributor today for Transis-Tenna—or write for literature.

JFD

THE BRAND THAT PUTS YOU IN COMMAND OF THE MARKET

JFD ELECTRONICS CORPORATION

6101 Sixteenth Avenue, Brooklyn 4, N. Y.

JFD Electronics-Southern, Inc., Oxford, North Carolina

JFD International, 15 Moore Street, New York, N. Y.

JFD Canada, Ltd., 51 McCormack Street, Toronto, Ontario, Canada

557 Richards Street, Vancouver 2, British Columbia

ANDREWS ELECTRONICS
Burbank, Calif.

FRANK QUMENT, INC.
San Jose

RADIO TELEVISION SUPPLY CO.
Los Angeles - Harbor City

WRESCO INC.
San Francisco - San Carlos

DUNLAP ELECTRONICS
Stockton - Sacramento - Marysville
Chico - Merced - Modesto
Pittsburg - Walnut Creek - Fresno

RADIO PRODUCTS SALES CO.
Los Angeles

WHOLESALE ELECTRONICS SUPPLY CO.
Ventura - Santa Barbara

WESTERN RADIO & TV SUPPLY, INC.
San Diego