

## electronic service dealer

THE OFFICIAL PUBLICATION OF THE CALIFORNIA STATE ELECTRONICS ASSOCIATION

VOL. 3, NO. 10

FEBRUARY, 1964



**ANDREW'S 10 YEARS OF COLOR DRAWS 500** 

How to sell service through window displays

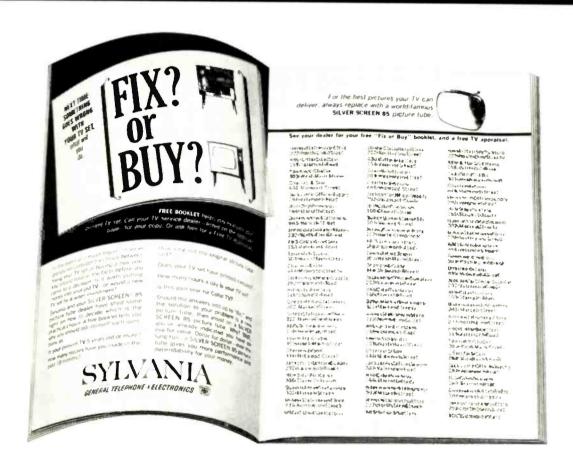
ERA Conference Set For Palm Springs Feb. 6-9

APPROACH TO SWEEP DEFECT ANALYSIS

## Contractor's License Issue Goes To Court

advisory board members attend san diego meet

## US from your Sylvania Distributor



## Was your name part of this hard-sell ad in GUIDE



If you took advantage of the offer, February 8th TV Guide tells every reader in your neighborhood that you are the expert on whether they should repair or replace their TV set. And a helpful free booklet titled "Fix or Buy?" is in your hands for distribution free to your customers. ■ National advertising in TV Guide, the booklet, plus a banner advertising the booklet for your store—a triple-barreled way to hit your very best prospects. ■ Specials like this are available regularly through your participating Sylvania Distributor. They show that he is sincerely concerned with raising your profits and your prestige—and so is Sylvania. ■ You can expect more than the highest-quality tubes when you deal with your PRODUCT-PLUS Sylvania Distributor.





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CSEA Press Secretary
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Managing Editor
IRVING TJOMSLAND

Technical Editor
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Business Manager

MORRI OVSEY

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A. 1 Anastasi, Commercial Bldg., San Jose, Colif.



CALIFORNIA STATE
ELECTRONICS ASSOCIATION, INC.
JIM WAKEFIELD
Executive Director
3333 Watt Ave.
Socramento 21, Cailf.
482-0706

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#### **COVER:**

Irv Tjomsland (left) goes over one of the first Television sets ever produced by RCA with Andy Futchik of Andrews Electronics. The set, built in 1936, was furnished by Ralph Johonnot of Tri-Color TV and was part of the 10 years of color program sponsored by the local distributor.

Winegard brings you the first low cost all-channel UHF antenna amplifier (channels 14 to 83)



## look at what the UHF-110 will do!

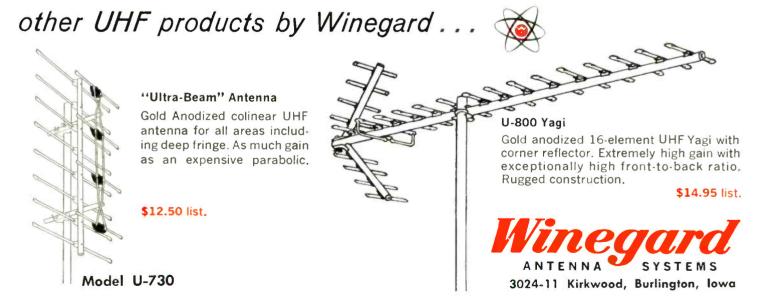
#### ADDS MANY MILES TO RECEPTION DISTANCE.

- Improves over-all signal-to-noise ratio as much as 12 DB
- Practically Eliminates Snow for better pictures
- · Works perfectly on color and black and white

Never before has an all-channel antenna amplifier been available for UHF. Now, at a price that everyone can afford, the new Winegard Model UHF-110 brings to UHF the same sensitivity and low noise reception as VHF! This means you can clear up snowy UHF pictures, get distant stations, and new clarity to color and black and white TV!

Model UHF-110 employs a new, ultra low noise RF transistor that amplifies UHF signals on all channels 14-83. It works on any UHF antenna and can be mounted on the antenna boom, mast or remote. Has balanced 300 ohm input and output. lightning protected circuit—no transistor burnout, comes with an all AC power supply. No polarity problems.

For your next UHF installation, try the new Winegard MODEL UHF-110. Ask your distributor or write for spec. sheets.



RCA VICTOR DISTRIBUTING CORP. 6051 Telegraph Rd., Los Angeles 22 RA 3-6661

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

DUNLAP **ELECTRONICS** 1800 18th St., Sacramento GL 2-3171

RADIO PARTS COMPANY 2060 India Street, San Diego 232-8951

#### Letters To The Editor

Dear Sir:

I am a little late in reading the December issue of the MESD. But I read an article in there called the "Tube Dilemna" . . . An article you might expect to find in a critical newspaper or mens magazine, but certainly not in a magazine that is trying to or is supposed to be dedicated to the betterment of the electronic distributors and dealers of California.

It is true some distributors and even some dealers of Radio and Television sales and or service are doing as you say, selling to the buying public at wholesale or near wholesale prices. To which I and most all other dealers are strongly against. This of course is something you will not see in the distributors or Dealers who sell Plumbing or Electrical supplies. And other good I could mention.

To buy from a distributor of Plumbing or Électrical supplies you must have a related business license.

But I do know that in most instances a man off the street can walk in to a TV parts House and buy wholesale no questions asked.

I assume by your article you agree with this? I think you should do something to your articles to be more constructive to the dealers and distributors.

Yours truly, Hoover T. Reed, Jr. Eureka, California

Dear Mr. Reed:

In an attempt to be realistic with our editorial on the "Tube Dilemma" (Dec. 1963 issue) I am afraid that you and perhaps others may have mis-interpreted my remarks. Of course, we are against the open door policy of some wholesalers but this fact does not stop them from selling to the general public. In my opinion the only way the industry can acquire the respect of the general public, or at least more of it, is through a realistic price on receiving tubes. The consumer today is educated in the "I can get it for you wholesale" theory. To hear people talk you would think that no one ever pays retall today. Profit seems to be a dirty word and to much of it means that you are a clip artist. Now, if the general public knows that he can purchase a tube for 50% off or \$1.50 for a listed \$3.00 the he can't help but feel cheated if you charge him \$3.00. If the tube cost you \$1.00 why not make that \$.50 and gain a happy customer? Our only suggestion is that we stop hiding behind the profit on parts and start charging for labor.

Dear Don:

Your editorial in the December issue of MESD was outstanding. I'm certain the dealer would be a lot healthier as would the distributor and manufacturer, Good thinking.

Frank Sestanovich ITT Dist. Products Div.

Dear Don:

Could you send a copy of your magazine to Sergeant Gunn, Bunco Squad, Police Building, Los Angeles, California.

Sincerely, Stanley Mosk, Attorney General by Vincent W. Thorpe Deputy Attorney General Dear Sir:

I would like to subscribe to MESD. I am just starting in business and have been exposed to your magazine in various shops that I worked in.

I would appreciate receiving copies of October and November.

Thank you, Elroy Jones

Mr. Martin:

Would you have an extra copy of the Sep-

tember, 1963 issue, Vol. 3, No. 5, of MESD. Would appreciate it.

Rickey Gamore

Dear Sir:

Please send Part 1 of Elements of Sweep Circuits as the November copy of MESD was misplaced.

I would like to have Part One, for a beginner.

Acrees TV Service

Dear Sir: I would like to receive the monthly magazine Modern Electronic Service Dealer. Would you kindly send me a sample copy preferably Vol. 3 #9?

Sam Randazzo

It's in the mail Sam . . . Hope you like it.

## **TUNER REPAIRS**



\$950

#### FOR COMPLETE OVERHAUL

Includes ALL parts (except tubes)
ALL labor on ALL makes

24-HOUR SERVICE with FULL YEAR WARRANTY

Sarkes Tarzian, Inc., largest manufacturer of TV and FM tuners, maintains two completely-equipped Service Centers to serve YOU. Both centers are staffed by well-trained technicians in this specialized field and are assisted by engineering personnel to assure you of FAST, DEPENDABLE service.

Tarzian-made tuners—identified by this stamping—received one day will be repaired and shipped out the next. A little more time may be required on other makes. Every channel is checked and re-aligned per manufacturer's specifications, not just the channels which might exist in any given area.

You get a 12-month guarantee against defective workmanship and parts failure due to normal usuage. Cost to you is only \$9.50 and \$15 for UV combinations, including all labor and parts except tubes. No additional costs. No

hidden charges. All tuners repaired on approved, open accounts. You pay shipping. Replacements on tuners beyond practical repair are available at low cost.

When inquiring about service on other than Tarzian made tuners, always send TV make, chassis and Model number. Check with your local distributor for Sarkes Tarzian replacement tuners, parts, or repair service. Or, use this address for fast factory repair service.



See your distributor, or use this address 10654 Magnolla Blvd., North Hollywood, Calif. Tel: 769-2720

MANUFACTURERS OF TUNERS... SEMICONDUCTORS... AIR TRIMMERS... FM RADIOS AM-FM RADIOS... AUDIO TAPE... BROADCAST EQUIPMENT





DON MARTIN

#### CONTRACTOR'S LICENSE ISSUE GOES TO COURT

On December 31 Jim Wakefield, Executive Secretary of the California State Electronics Association, appeared before the Oxnard-Port Hueneme Municipal Court in regards to an action brought against one of the Association's members. The case was the State of California Contractor's License Board against a Ventura Service Dealer for installing a Public Address System in a new Community Center.

For a number of months we ran editorials on the interpretation of this Contractor's License law and how it affects the service industry. Our basic conclusion was that any service dealer who is engaged in the installation of sound systems, Antenna Systems or even Antennas that run over \$100 better have a contractor's license. The reason for these editorials was this particular case in Ventura.

Although Wakefleld was not directly representing the defendant in the action he did present the Industry's position in regards to this type of work. He reminded the court that the results of this action could directly affect a possible 33,000 dealers in California (the new registration Bureau had sent out 33,000 application forms).

At first, it seemed that the case would be dismissed if the defendant acquired a contractor's license, but in later developments the State asked that he plead guilty to the charge and set a foundation for all future such actions. Although economically unsound, the defendant has refused to plead guilty and the trial has been set for February 27. The grounds for this plea of not guilty is based on the premise that this was an isolated case and the work did not require a license and that the work was not an improvement to the structure of the building. Actually, in this particular case, the entire system can be removed in a matter of hours and all that would remain is two or three holes.

It's ironic that this particular installation was done as a civic contribution to the building of this community center and there was no profit involved in the work.

The results of this case could have a reaching effect on the service industry. It may mean that every dealer in the State who wishes to sell antennas or to do any type of system installation work will have to be licensed under this code and pass certain tests. The cost, I believe, is \$20 for the application and \$20 per year.

As an industry, I believe, we should fight this type of additional governmental control. The Electronic Service Industry is completely divorced from the building profession and should not have the confusion of both the Bureau of Electronic Repair Dealers Registration and the Contractors' License Board. Antenna System installation, in particular, requires very little, if any, structural requirements and Sound and PA System installation is almost a business in

itself. We will try to keep you advised of the progress being made in this action and hope that many of you will try to attend the trial on February 27.

#### REGISTRATION FEE CHALLENGED

We have been receiving numerous calls and letters in regards to the Registration Fee. The problem is that after a dealer pays the \$35 to the State he receives his registration number in return but also a notice that he will be required to pay an additional \$35 in June of this year.

In all of the public meetings on this new law it was pointed out that this would happen and does happen with every new law that goes into effect. Actually, the law became effective in September of 1963 and the original \$35 pays a dealer from that date to the end of the fiscal year in June of 1964. At that time, every dealer will pay another \$35 and this will pay him up until June of 1965. This is actually written into the law and can only be changed by action of the legislature.

We do have one suggestion to make and that is that the Bureau's budget is based on about 8,000 registered dealers. If more than that is actually registered, the fee will be decreased accordingly. It may be a good idea to make sure everyone is registered and encourage them to do so as soon as possible. On the other hand, all dealers who have not registered and are remaining in business should be reported to the Bureau in Sacramento for necessary action.

#### YELLOW PAGE ADVERTISING PROBLEM

In recent months, through the action of the Association, we have been able to obtain the full cooperation of Pacific Telephone in governing the type of advertising they will accept for the Yellow Pages. There has also been several new tariffs enacted by the Public Utilities Commission that has helped the picture considerably. However, in many of the new Directories, being published by General Telephone, there seems to have been very little progress in obtaining the same type of cooperation and we have received a number of complaints from dealers in their service areas,

As a point of information, a formal meeting has been set for January 28 between representatives of CSEA and General Telephone to discuss the problem of misleading advertising and, it is hoped, we will be able to obtain the same type of cooperation. You must realize that General has been in the middle of a strike for several weeks and that this delay could have been unavoidable.



## CSEA NEWS WIRE

dates

dealer news

programs



#### Weston Brings Experience to New Bureau

Dan Weston, former Assistant District Attorney of Contra Costa County in Northern California, and newly appointed Chief of the Bureau of Electronic Repair Registration, will bring with him in a great deal of outstanding experience and background to the Bureau.

Weston was most recently assigned to the Criminal Prosecution and Consumer Fraud Division of the District Attorney's office and is well qualified to assume the duties of the new chief.

Former Resident of San Diego A graduate of the University of California at Berkeley Law School he was admitted to the California Bar in January 1960. A former resident of San Diego and a graduate of San Diego State College he has lived in Northern California for the past six years. Born in Tours, France, in 1932, to missionary parents he has traveled throughout Europe and Africa. He is married to a registered nurse, Arlene, and they are expecting their first child this month. He served as an Air Force Jet Pilot from 1955 to 1957 and is presently a Captain in the Reserve.

#### Finally Recognized

In reviewing his new position Weston stated that, "through this new law the State Legislature has finally recognized the Electronic Repair Profession as a legal enity. It seems to me that in the administration of the Bill it will not

## San Diego Installation Dinner To Feature Advisory Board Members

San Diego Chapters #13 and #18 will jointly sponsor an installation Dinner Dance at the Town and Country Hotel, Hotel Circle, San Diego, on February 29.

The event, which will begin at 7:00 p.m. with a cocktail hour and dinner at 8:00 p.m., will feature Miles Rubin, Los Angeles attorney, and Capp Loughboro, Ventura service dealer who are members of the new Bureau of Electronic Repair Dealers Registration Advisory Board. Also present will be Jim Wakefield, executive secretary of the State Wide California State Electronics Association.

The new officers to be installed at the event include: Steve Reynard as President; Harold Baughman, Vice President, and Mary Trace as Secretary-Treasurer of Chapter 13. The new officers for chapter 18 will include Bob Tomko as President; Stan Bendowski, as Vice President, and Helen Merrill as Secretary Treasurer.

The event is by invitation only and a complete mailing will be sent out to all dealers in the Industry whether or not they are members of the two local chapters of CSEA. Anyone not receiving an invitation, who would like to attend, should call the CSEA office at 474-3757 as soon as possible.

#### BOARD OF DELEGATES TO MEET IN FRESNO ON MARCH 22

The Board of Delegates of the California State Electronics Association is scheduled to meet in Fresno on March 22, according to Chairman Ron Kealey.

The Board, which is required to meet in March and September of each year, will once again discuss the possibility of a State-wide Convention of the entire membership as well as a new method of determining the Associations officers. In September of last year the group made some suggestions to the Board of Directors and this material will be returned to them for further action.

Plans are under way to invite members of the new Bureau of Electronic Repair Dealers Registration Advisory Board to address this group and to answer any questions that may be in the minds of their chapter members. Further details will be announced in the March issue of MESD.

only protect the Consumer but upgrade the service dealer image to where it will gain the respect, of the public, that it deserves."

#### NEA to Be Backed By Individual Chapters & Members

The Board of Directors of the California State Electronics Association endorsed a program by which any member or chapter of the State-wide group may join the National Electronic Association.

The original proposal was in three parts. 1. Full membership in NEA by all the membership as a joint charter. 2. Any seventy-five members of CSEA that will join NEA would make the state group a full member of NEA or 3. Any four chapters with five members each would qualify CSEA as a member of NEA.

With the endorsement of seventy-five members or more by the Board, membership can be made by contacting the State office of your desire to become a member of this nation-wide association. The cost of membership is \$1 per month but payable a year in advance at \$12. This would entitle each member to receive all of the benefits of the national group and could display the customary insignas and emblems that would designate membership in a national service organization. Every CSEA member is urged to take advantage of this offer if at all possible. The Board feels that a great deal of value can be obtained by an individual shop being a member of a National group but did not feel it should be mandatory of the entire membership.

#### Mel Haury Named To CSEA Board of Directors

Mel Haury, well known service dealer from Morgan Hill, California, has been named to fill a vacancy on the CSEA Board of Directors. Haury, who is presently the chairman of the Zone "B" Board of Delegates will resign this position in order to step up to the State-wide groups Board of Directors. He will be representing Zone "D" and will replace Russ Hamm who has been unable to participate in the Board's activities for several months.

#### CSEA PRES. MEFFORD APPOINTS COMMITTEE TO GIVE BETTER PROGRAMS

CSEA President Emmett Mefford stated to the Board of Directors that the Association must develop a system that will provide better programming on a chapter level.

In making this statement he emphasized the importance of good programming and that it is the foundation of all good chapters. A committee made up of Wes Keys of Walnut Creek, Ed Fort of San Diego and Ralph Johonnot of Burbank was appointed to investigate the possibility of providing better programming and will report back to the board in March.

Also asked to work with this committee was Don Martin publisher of Modern Electronic Service Dealer. At this meeting he suggested that some central figure act as a liaison between manufacturers and the chapters and to actually screen and schedule events throughout the State. He has been asked to present this idea to many of the manufacturers attending the ERA Palm Springs Conference in February and to report his findings to the Board at a later date.

FAST FAST FAST FAST FAST

## Registration Forms Streaming Into State Office

According to latest reports over 15,000 registration forms have been returned to Sacramento with close to half of these on a protest basis. In sending out over 33,000 forms the Bureau tried to cover every possible service outlet and, in doing so, reached many firms that were not engaged in this type of work. All of those firms who have protested the payment of this fee will have their protest investigated and if improper will have their money refunded.

A few dealers have made their protest on the registration form itself and we would like to remind everyone that this form is actually your registration and it will be returned to you after being validated. Anything that you write on the face of this form will remain there so you are asked to be careful in filling out these froms.

Any dealer who has not received a form should write to the Bureau of Electronic Repair Dealers Registration. Mr. Dan Weston, Chief, 1020 "M" Street, Sacramento, California.

FAST FAST FAST FAST FAST

## Apprenticeship Meeting Held In Fresno

The first 1964 meeting of the California State Joint Apprenticeship and Training Committee for the Radio-Television Industry, was held on January 13 in Fresno, California.

The meeting, attended by Ed Byrd of San Francisco, Gil de La Long of Fresno and Jack Carney of San Bernardino representing employees, James Wake-field of Fresno, Darrell Petswal of Sacramento, Ken Preston of Stockton, Boh Reynolds of San Bernardino, John Blackwood of Bakersfield and Ray Denham of Fresno representing Employers and Lloyd Steele State Board of Education, Ray Cresswell, San Jose Unified School District and James Roberts, San Jose Division of Apprenticeship represented their affiliations, was held in order to set up a proposed topical outline for the related instruction of a Radio-Television apprenticeship program.

The outline adopted by the committee included: Introduction, Basic Instruments, Audio Amplifiers — Tape and Record Players, AM Receivers, FM Receivers, TV Receivers, Color TV, Stereo Circuitry and Intercom Systems, Transmitters, Industrial Controls and Management.

At this meeting, James Wakefield was elected as chairman of the group with Ed Byrd named as the secretary. With the adoption of a basic outline for study two committees were appointed to recommend the curriculum and entrance examinations. Ray Cresswell and Lloyd Steel will mork on the program and curriculum and Jack Carney, John Blackwood and Bob Reynolds will work on the entrance exams.

The next meeting is scheduled for the Jack Tarr Hotel in San Francisco on March 2.

#### BERD Board to Meet In Los Angeles Feb. 21st. 22nd

The first meeting of the new Bureau of Electronic Repair Dealers Registration Advisory Board in the Los Angeles area will be held on February 21st and 22nd at the State Building in downtown Los Angeles.

These meeting are open to the public and will give Los Angeles area dealers an opportunity to meet and to see this new advisory board in action.

FAST FAST FAST

## IF YOU NEED A PHILCO PART YOU CAN GET IT FAST!

THERE'S A FULLY STOCKED PHILCO PARTS CENTER NEAR YOU

Whatever you need . . . just dial your Philco Parts Distributor

- 1. A nationwide network of Parts Distributors.
- 2. Backed by Parts Warehouses with millions of dollars in parts.
- 3. Parts for new models shipped automatically!
- 4. Orders handled by experienced parts specialists.
- 5. Emergency orders transmitted fast ... processed within 24 hours.

PARTS & SERVICE OPERATIONS

## PHILCO

A SUBSIDIARY OF Ford Motor Company

TEAT TEAT TEAT





#### By EMMETT MEFFORD

The most basic and fundamental requirement for the expansion of any association or lodge is membership, not only in numbers but in active participation of members to accomplish the most good for the entire membership. It seems that in any association or club the most active participating members are in the minority, but were it not for these few to lead the way there possibly would not be the great strides of progress in our industry.

One might compare membership of an active growing association to those couples attending a social function. Without active participation the social turns out to be a FLOP, and in most cases the non-participant voices were the loudest in condemning. True we all have our own business to consider first, but the

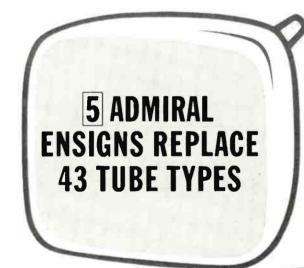
way I see it unless we take a little time to invest in our future we will have a more difficult time in maintaining a profitable growing business.

Now, as a result of the Registration Law requiring all service dealers to register, there have been some dealers around the state voicing their objections to such a law, true it is impossible to please everyone with any one particular action. Therefore, I would suggest to all inactive members and all non-member service dealers to give some serious thinking to the problems facing all Electronic Service Dealers and to join with us in The California State Electronics Association so we may develop fair and equitable operating policies that truly represent the majority in the Electronic Service Industry.

To consider investment in our Electronic Service Industry beyond the bounds of the state of California, there is a growing favorable consideration of joining a National Electronic Association (NEA), which has been formed recently by Associations of the various states of the United States to further give us in the Electronics industry a greater voice in national policy-making.

For the above reasons and many more projected programs to up-grade and develope a more equitable service industry for our members, I ask that each of you non-member service dealers join us and participate in our efforts to create service policies which is both beneficial to customer and dealer alike.

I also ask that each member bring a non-member to your next Chapter meeting.



ENSIGN	17ATP4	17AVP4A	17CLP4
17BJP4	17ATP4A	17BUP4	
REPLACES	17AVP4	17CBP4	
ENSIGN	21ACP4	21 A Q P 4	21BSP4
21AMP4A	21ACP4A	21 A Q P 4 A	
REPLACES	21AMP4	21 C U P 4	
ENSIGN 21CBP4A REPLACES	21FLP4 21ALP4 21ALP4A 21ALP4B 21ANP4 21ANP4	21 ATP4 21 ATP4A 21 ATP4B 21 BAP4 21 BNP4 21 BTP4	21CBP4B 21CMP4 21CVP4 21CWP4 21DNP4 21CBP4
ENSIGN	24ADP4	24ATP4	24XP4
24CP4A	24CP4	24VP4	
REPLACES	24QP4	24VP4A	
ENSIGN 24AEP4 REPLACES	24DP4A 24YP4	24A NP4 24ZP4	

## REDUCE INVENTORY! INCREASE SALES!

Save space, save dollars! Make more profit per sale with the Admiral ENSIGN "Big 5" as your basic tube inventory. 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. Every Admiral ENSIGN tube is of fine/precision quality manufacture.



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

Be wise ... standardize on



#### REPLACEMENT PICTURE TUBES

Always Fine/Precision Quality

## MOCH CLAIMS FTC REMARKS HURT SERVICEMEN

Recent Federal Trade Commission interpretations of wholesalers' legitimate functions have led to a very serious breakdown in marketing practices in the electronic distributing field, Frank J. Moch, executive director of NATESA, asserts in a statement presented before the House Subcommittee on Distribution, November 18.

In his statement, Moch presented to the subcommittee, a unit of the House Select Committee on Small Business, parts of two letters received from the FTC, one in 1958, and the other in 1960. The 1958 letter, according to Moch, defines wholesalers as a firm that "sells to the trade for resale and seldom, if ever, to the purchasing public," and defines wholesale as "meaning a sale in large quantity to one who intends to resell."

The FTC letter of 1960, says Moch, is

FROM THE IOW A TSA "BEACON" we found the following information that we felt might be of interest to the California Dealer Profession. A chart, similar to this one, might be incorporated on an estimate sheet as a guide to technicians making house calls. Of course, you would use your own price breakdown but we were impressed with how well this one told the story of television service.

## UNIFORM PRICING INDEX TELEVISION — Black & White

1.	A.C. Input Circuit	<b>2</b> 0 60
2.	Audio Circuit	15 7/
3.	Automatic Frequency Control System	17.50
4.	Automatic Gain Control System.	10.50
5.	Control: Single Unit	19.50
	Dual Unit	(.6
6.	Damper Circuit	11.63
7.	Deflection Yoke and Circuit	14.00
8.	Filament Circuit	12.80
9.	Focus Circuit	9.70
10.	Horizontal Oscillator Circuit	8.40
11.	Horizontal Output Circuit	17.25
12.	Horizontal Output Circuit	16.50
13.	I.F. Amplifier Circuit	13.25
14.	Picture: Tube: Replacement or Repair (B-W)	10.00
15.	Power Supply Circuit (Low Voltage)	12.30
16.	Selenium or Silicon Rectifiers.	8.75
17.	Synchronizing Circuit (Vert. or Horiz.)	17.85
18.	Tuner (Turret Type)	15.80
19.	Tuner (water Type)	10.00
20.	Tuller (water Type) Clean	6.90
21.	vertical Oscillator Circuit	10 25
22.	vertical Output Circuit	16.09
23.	video Circuit	17 19
23,	Clean Picture Tube	4.00
	ALIGNMENT OF TUNED CIRCUITS	
24.	Video and Sound (B-W)	27.50
25.	Automatic Frequency Control Circuit	6.60
<b>26</b> .	Soling Discriminator Circuits	4.00
27.	Tuner (Local Oscillators only)	2.30
	COLOR CIRCUITS	
28.	Demodulator Circuit	22.50
29.	Chroma Oscillator	22.30
30.	Dynamic Convergence Circuit	27.50
31.	Complete Convergence Set Up	10.70
32.	Picture Tube Replacement	25.00
33.	Alignment of I.F. & Croma Circuits.	49.50
	DASIC PERS	42.50
34.	Remote Control Amplifier.	
35.	Remote Control Angine (Markey 1-1)	22.50
36.	Remote Control Action (Mechanical)	18.75
37.	Basic TV Shop Fee.	4.75
38.	Minimum Home Service Fee.	6.95
39.	Delivery & Reinstallation	3.50
40.	Each Additional Set in Same Home.	3.50
41.	Location of Intermittent Problem	15.00
41.	Analysis and Location of Trouble When Estimate is given and Set is Not Repaired.	10,00
42. 43.	Special Disassembly Problems.	
45.	Special Instalaltion Problems	

"apparently in complete contradiction." This letter explains that wholesaler following a dual method of distribution, "is under no legal obligation to sell to dealers at prices which will enable them to compete with their suppliers on sales to consumers." The letter continues: "In a case where the wholesale or jobber sells to consumers at prices which his dealers cannot meet, the wholesaler is simply making use of his lawful competitive advantage. Dealers would still be unable to compete for the business of consumer accounts whether the wholesale price to the latter was lower, the same as, or slightly higher than the price to dealers."

Such interpretations, Moch argues, results in a "continuing strangling of the very essential radio-television servicing industry." Turning to a situation in mid-Illinois, Moch went on to say that "the ultimate in damage to all service people occurs when the wholesaler sets up a service company of his own and then using his wholesale buying power, advertises to the public . . .

"For 23 years many small independent service technicians supported this 'wholesaler' and through their trade purchases made him a successful wholesaler, and by the use of a brand of tubes, for instance, that he wholesaled, created acceptance in the area for that brand, and suddenly the olleged wholesaler becomes a retailer, taking for himself all the benefits accrued by many over many years. Obviously his accrued purchasing power is an insurmountable advantage."

#### Calls Distributors "Necessary"

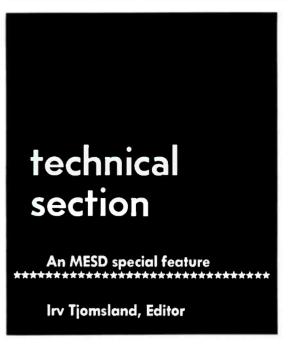
Moch, in his appearance before the committee, acknowledged that electronic distributors are necessary to the marketing of tubes and components, emphasizing that the total number of tubes and components required for servicing "would drive a computer mad." The complexity of parts requirements makes it "impossible for a factory to deal direct with a retailer or consumer, and it is equally impossible for an independent radio-ty service technician to carry fully adequate stock of components without the back-up of a wholesaler."

Because the independent servicer is responsible for the volume of parts which justify the establishment of a wholesaler, Moch observes, "... the wholesaler should not compete with those who make it possible for him to buy cheaper and make a profit besides."

The House Subcommittee, with Rep. James Roosevelt (D., Calif.) as Chairman, is holding hearings on the problems of dual distribution and its effects upon small business.

#### For the Beginner:

A NEW SIX PART SERIES—PART FOUR ELEMENTS OF SWEEP CIRCUITS



## APPROACH TO SWEEP DEFECT ANALYSIS

#### 4-1: THE SCORE TO DATE

The first three sections were concerned with the time elements of the sweep system, the horizontal sweep cycle, and basic measurements to prove normal operation.

#### 4-2: SWEEP DEFECT ANALYSIS

The tests outlined in Section 3 are precautionary. It is difficult to prove a circuit "good" and it follows that other tests may be necessary if signs of trouble are detected.

This section will suggest a methodical approach to sweep defect analysis. Tests are arranged to help pin-point failure in a logical, accurate, and speedy manner with the least possible disarrangement of the receiver.

It is obvious that obstructions, such as cages, covers, and buried components may make it impossible to follow the recommendations literally, but the purpose of each should be understood, and a substitute check should be worked out if possible.

For instance: In 4-5 it may become important to check cathode current in the horizontal output tube. The most convenient method is to measure the voltage drop across a cathode resistor and compare it to the specification in the schematic. If the cathode is grounded

the test method must be changed. If the circuit is opened and a milliampere meter is inserted, total cathode current can be read directly. But what if no suitable meter is available? A 10 ohm resistor can be inserted in the cathode circuit and the voltage across it noted. A minor amount of arithmetic will determine cathode current and complete the test.

The new man should remember any test procedure will be most useful if the facts he must "know for sure" can be developed before he makes major component changes.

#### 4-3: VISUAL INSPECTION

Many a tricky problem can be simplified by careful visual examination. A blown fuse that is not shown on the schematic, a "Phono-TV" switch in the "Phono" position, a dual tube with only one filament lighted, and dozens of other "booby-traps" can be corrected without lost time and hard work if a careful inspection is the first step in the procedure.

A cooked out resistor or an overheated flyback can eliminate the need for complete analysis if it is spotted in time, but, unfortunately, a dead sweep system often looks exactly like a live one, and if that is true some of the following tests will be necessary to pinpoint the defect (s).

### 4-4: HIGH VOLTAGE LOAD ISOLATION

If no corona can be detected in the vicinity of the plate cap of the high voltage rectifier disconnect the cap and recheck for corona. If corona reappears the rectifier is overloaded and the problem should localize to some factor such as a shorted rectifier tube, shorted CRT, improper voltages on the CRT gun, shorted high voltage filter capacitor or defective anode lead.

If corona is not restored at the plate cap, leave the cap disconnected and proceed to next test.

#### 4-5: VOLTAGE TESTS

With a suitable voltmeter check for B plus at the plate of the damper, screen voltage on the horizontal output screen, negative bias at the control grid, voltage across the cathode resistor, if one is used, and boost.

If B plus, screen, grid, and cathode voltages are normal, but no boost is present switch off power to make the following resistance check:

### 4-6: DAMPER PLATE-CATHODE RESISTANCE CHECK

(Continued Next Page)

#### PART IV

(Continued)

Measure resistance from plate to cathode of damper. If reading of 50K ohms or less is noted, reverse probes. If reading persists remove damper tube from socket. If continuity is still present a shorted boost capacitor or a shorted yoke should be suspected. If no reading is obtained start substitution tests.

#### 4-7: SUBSTITUTION

Disconnect all leads from the horizontal yoke winding to the flyback. Connect the high and low side of a similar yoke winding to the same points on the flyback as the original. Switch on power and check for presence of corona at the plate cap, or measure boost. If either or both appear the original yoke is shorted. If neither appear, leave the substitute winding connected, and disconnect any accessory components such as AGC, AFC, Blanking, and other pulse loads, any capacitors connected across the flyback terminals, any connections between the damper cathode and filament, any width coils or other accessories.

If corona or boost do not reappear the flyback should be substituted.

#### 4-8: EXCEPTIONS

Some of the very earliest receivers employed resistance across the damper plate and cathode, and this will make the test suggested in 4-6 impractical. In addition, these early transformer type flyback circuits applied RF to the plate rather than the cathode, and this would make the "damper plate cathode" check in 4-5 impractical.

The tests outlined can be applied to both the "autoformer" and "direct drive" type flyback circuits, and since the autoformer type circuit represents the majority usage the exceptions should not troublesome. However the best way to identify the early transformer circuit is to check the method of connecting B plus to the sweep circuit. If B plus is connected directly to the flyback (rather than to the plate of the damper) the circuit is a transformer type.

#### 4-9: DRIVE VARIATIONS

Mention is made in 4-5 of the negative hias on the grid of the horizontal output tube. The new serviceman may feel that the circuit is OK if the negative reading corresponds to his schematic data, but if he does he can be in trouble.

The fact that the negative voltage is present and corresponds to print data does *not* prove that "drive" of a usable type is present.

Before going into that, let us review the subject of drive. In 2.2 it is explained that a sawtooth type voltage is applied to the grid of the horizontal output tube. This waveform is so shaped that it starts conduction in the horizontal output tube at about the time the beam in the CRT is passing the center of the face plate as it moves from left to right. This sawtooth is generally referred to as "drive" and because it is positive going, some grid-cathode conduction tends to occur. This conduction causes the grid to develop a negative voltage, just as the plate of a rectifier does, and that is the reason many servicemen believe drive is OK if the negative bias is OK.

However, it is entirely possible for the grid to have the correct negative bias and have no usable drive. For instance:

If AC hum or ripple of sufficient amplitude is applied to the grid the ex-

pected bias may appear, but no sweep action result.

If the horizontal output tube is gassy or defective in certain ways it may draw so much power from the oscillator circuit that oscillation stops, but the bias may appear.

If the horizontal oscillator frequency changes, either doubles or drops to half frequency the sweep circuit may not operate, but the bias will appear.

There are many combinations of minor troubles that can interfere with drive to such an extent that sweep will cease, and these must be recognized or identified before corrective action can be undertaken.

#### 4-10: VISUAL EVIDENCE

It is obvious that the new serviceman is going to be in the dark if he finds all tests OK, but the sweep system is still inoperative. What then?

The answer is "Scope the drive".

If the new serviceman can see the signal that is present on the grid of the horizontal output tube he can eliminate all of the uncertainties of the voltmeter measurement.

With a little skill and a reasonably good scope he will be able to see if the shape of the waveform is correct. He will be able to tell if the oscillator is running at the correct frequency of 15,750 (approx) cps, and if the scope is properly calibrated he will be able to see if the peak-to-peak amplitude of the waveform is within tolerance.

If the circuit under test incorporates a "Syncroguide" type oscillator circuit the scope pattern might appear as in Fig. 1. Late variations of this circuit are used in many color receivers.

If the circuit is of the "ringing coil" multivibrator type, a pattern as in Fig. 2 can be expected.

Every serviceman should be familiar with these two patterns, because the correct amplitude, shape, and frequency, can indicate good performance of the horizontal oscillator and sync system.

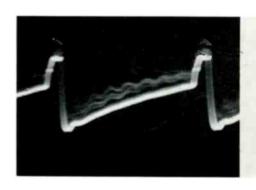
#### 4-11: CONCLUSION

No two receivers will perform exactly the same, and no single receiver will correspond exactly to schematic values.

Changing a component such as a flyback may be a case of curing a symptom rather than eliminating the cause of the failure.

When is "close" good enough? What is the tolerance of the yoke winding used for substitution tests? When is screen current dangerous? How should drive be adjusted?

Section 5 will be concerned with adjustment, tolerance, and safety factors.



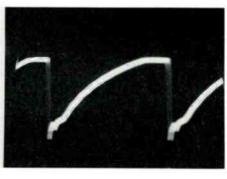


FIGURE 1

FIGURE 2



## This straight shooter never gets trapped

G-E "SG" straight gun picture tubes\* do away with ion traps. No fuss, no call-backs. A G-E "SG's" rugged gun fires electrons with uncanny precision straight at the aluminized phosphor screen—assuring sharply resolved pictures up to 80% brighter. How's that for "Accent on Value"? These features save your time and give your customers thousands of hours of viewing pleasure.

And that's not all the value accents you get with these "straight shooters." A single G-E "SG" picture tube replaces as many as twenty other types, bent gun or straight gun—the types that get "trapped." In fact, with only 25 G-E "SG's", you're ready to replace 250 other picture tube types. You'll serve customers faster—and say good-bye to emergency pick-ups and the ion trap nuisance.

MORE "ACCENT ON VALUE" FROM YOUR

G-E ELECTRONICS DISTRIBUTOR

CONTACT ANY OF THE FOLLOWING DISTRIBUTORS:

## MILLERS RADIO & TV SUPPLY, INC.

530 East 8th St., Dakland, Calif. 7076 Armory Dr., Santa Rosa 1263 Arroya Way, Walnut Creek 785 S. First St., San Jose

#### ANDREWS ELECTRONICS 1500 W. Burbank Blvd., Burbank

## WHOLESALE ELECTRONIC SUPPLY

265 So. Laurel, Ventura 209 W. Cannon Perdido, Santa Barbara

#### GET THIS "ACCENT ON VALUE" BONUS, TOO!



**COOK ELECTRONICS** 

210 E. Hardy St., Inglewood

EDISCO, INC.
5901 Mission Street, San Francisco

This 16" x 12" x ½" polyurethane foam bench pad neatly protects the picture tube from marks and scratches. The handy pad's yours with the purchase of a G-E SG-21FLP4 Service - Designed "straight shooter." Your

reliable General Electric distributor is waiting for your order now. Call him today. General Electric Company. Distributor Sales, Electronic Components Division, Room 3018, Owensboro, Kentucky.

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## GENERAL ELECTRIC

#### KIESUB CORP.

311 W. Pacific Coast Hwy., Long Beach 1162 Industrial Ave., Oxnard 14511 Delano St., Van Nuys 910 - 11th St., San Bernardino 318 - 21st St., Bakersfield 2426 - 4th Ave., San Diego 725 N. Los Angeles St., Anaheim



The window display has often been subject to neglect and rejection by the service dealer and many a small businessman. It is generally felt that window displays are reserved for luxury department stores and the like. It is time that this misconception be cleared up—and immediately.

It is evident that outer appearances make first and lasting impressions. Show windows describe to passers-by the type of business you're in, whether you are neat or sloppy, whether you are progressive or old-fashioned and what exactly you are selling (service, of course).

If creative and interesting enough, these windows can attract off-the-street customers and intice them to inquire within. The average TV-Radio service dealers's store has approximately 5% of floor space given to show window and display. Make inexpensive use of this space by relating to the customer that you do quality work, a quick job, charge only reasonable rates, that your work is guaranteed, you make house calls, you give free estimates, you are an authorized dealer of famous brand sets and tubes and you use only the finest up-to-date equipment.

These particulars insure the customer of your reliability

and tends to build up their confidence in you as a dealer.

Expense is not always synonimous with quality and effectivness. Old equipment can be made into effective displays with just a little ingenuity. Originate a display that hits home with many passers-by and make them ponder if they need your service. Use an old piece of equipment and ask the shopper—"Is your antenna, TV, radio, etc., in this same bad condition?" Make them aware that these, perhaps, dormant articles possibly could be made useable once again through you servicing them.

Utilize key words that are impulsive and make shoppers take immediate action—in fact, ACTION is a perfect exam-

ple of a word in itself.

It seems that people in general are obsessed with a natural feeling of status—that explains why thousands of perfectly good automobiles, etc., are traded in yearly for the simple desire of the owner to drive only the newest. This theory of obsoletion can be used in window displays. Make the customer realize that his equipment is outdated and suggest, through window slogans, that he come in and discuss such things as conversions or other repairs that might update merchandise.

Don't be afraid to be a little dramatic or perhaps humorous. Both attributes are definite eye-catchers-try, however, to avoid triteness, a sin in any phase of advertising. "Gimmick" approaches are often one of the most successful facets of window advertising. Remember the old game of guessing how many jelly beans in a large glass container. Well, change jelly beans to resistors or the like and you've got vourself a "Gimmick." Customers get a kick out of the challenge and you most likely will have a steady stream of guessing prospective customers who have come in to match their wits with the prize you offer for the correct estimate. Where the service shop is concerned, however, this "Gimmick" approach will only get the customer into the store and from then on other "action" displays inside and your own salesmanship will determine whether or not a sale will occur.

Before going all out with a magnificent display, it would be advisable to evaluate just what type of "traffic" is passing your shop and then cater to that one in particular. If heavy sidewalk traffic views your window daily, you need "traffic-stoppers" and make sure to change your display often. Be less dramatic if the daily traffic is moderate. If you are located in a district where the majority of the traffic is vehicles lean to the bigger and simpler windows. One that can be observed by fast moving traffic. Window changes, as said before, should be determined by your location. A busy area might require two changes a month (24 per year), a medium location—one a month, and a minimum amount would perhaps be once every two months.

Displays should be a planned expenditure entered into the financial budget of the business. A dealer whose yearly volume is about \$20,000 could safely allow an expenditure of 1% or 2%, which would mean from \$200 to \$400.

Lighting is an important aspect of window advertising that is often overlooked. Lighting is used not only at night for illumination, but also in the daytime to combat reflections on the glass, unmanageable shadows and the general levelling effect of sunlight. Lighting is divided into overall, or background lighting, and high lighting. The lighting department of your local utility company will be more than happy to assist in recommending the number of lamps you would need to attain the correct level of illumination.

Floor coverings add warmth and depth to a window. Suggested materials might be: plain carpet, burlap (streched tight and stapled in place), heavy paper of poster quality, wall-paper simulating knotty pine, brick or felt and colored cotton flannels.

A professional appearance can also be attained by unusual backdrops, such as a "wallpaper" of radio diagrams (or TV diagrams), or response curves. Many stores featuring HiFi equipment or phono conversions have arranged a backdrop of sheet music, which has enough pages of staffs and notes to wallpaper a large area. Silhouette spray painting is also effective.

Permanent props can be incorporated and used as a basic structure around which your window displays can be developed. A simple set of block fashioned steps covered in a corresponding material as the floor is extremely effective. A good size for a small window is about eight inches for both tread and riser. The steps may be the full width of the window, but it is more flexible to make them in sections that can be re-arranged in different shapes and forms. An easel can be used to hold a prepared poster pertaining to the particular display. Dummy tube cartons are effective and can easily be obtained.

With the on-set of the do-it-yourselfers, many individuals tend to simplify the job and talents of the serviceman. Your window could be an educational outlet to the public, letting them know and visualize the intricacies of your industry and the delicate complicated apparatus that your expert professional service handles.

The "mobile" is an interesting "traffic stopper" and for some reason fascinates many a passer-by. It has self generated motion and can be constructed quickly and cheaply by attacking items of electronic significance to wires, such as miniature tubes, resistors, condensors, etc.

There is a simple way to plan new window arrangements and that is to key the windows with the seasons. Use promotional suggestions such as: Winter is a good time for stay-at-home listening to radio, phonograph, or watching TV. Summertime is portable time and car radios, too. Also a good opportunity for TV check-up campaigns. Also play-up gift giving months such as Christmas, graduation, etc.

If at all possible, try tying in with manufacturer's national ad campaigns, or special events such as election or athletic games ("Is your radio in top-shape for the World Series games?").

With all the preparation and planning of your window display don't neglet to keep the window well washed so that passers-by can see just what you are displaying. It is also advisable to have signs, cards and price tickets made professionally.

The old cliches: "First impressions are lasting impressions, and a picture is worth a 1000 words is undoubtedly true. It is hoped that this article, along with previous MESD special management articles, has been beneficial to you, the TV service dealer.



### INDUSTRY NOTES

### OVER 500 DEALERS ATTEND ANDREWS 10 YEARS OF COLOR PROGRAM

programs ever held in Southern California was the consensus of opinion fol-

One of the most successful open house lowing the recent 10 Years of Color pro-

gram sponsored by Andrews Electronics in Burbank.

## **PICTURE TUBE SAVINGS!**





## **BONDED FACE & BLACK & WHITE**

- TOP QUALITY
- ALL SIZES
- ONE YEAR GUARANTEE

WHOLESALE ONLY-DIRECT FACTORY TO YOU

#### Distributors of:

Westinghouse Receiving Tubes-Rogers Transformers & Yolks-Test Equipment—Condensers—Resistors—Antennas—Everything for the TV Replacement Market.



STORES IN

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

LYNWOOD 10906 Atlantic NE 9-6248

EAST LOS ANGELES 5916 Whittier Blvd. PA 1-2907

The highlight of the evening was the live demonstration of the famous iron monster of Southern California in full color. The unit, built through the efforts of many old-timers in the area over ten years ago, lived up to advanced billing and functioned on schedule. In comparing the unit with the new Zenith, Motorola and RCA sets that were also on display it left a lot to be desired and I don't believe anyone will be turning in his new set for the monster very soon.

Kicking off the program, Irv Tjomsland, representing the Bert Knight Company and Stancor, recreated some of those early days and drove it home with the personal introductions of E. F. Pete Pedersen, now KHJ-TV, Walt Lessing of RCA; Bill Barron of the Rep firm. John Colbert of Ferrodyne and Larry Vickers of Bell Radio Service. One other old-timer that couldn't make it at the last minute was Glen Gassard.

Following this Andy Futchik introduced Don Coogan and Jerry Carne of RCA, Lou Bender of Sues, Young and Brown, Joe Murphy of JFD Electronics. and Ralph Johonnot of Tri-Color TV. Johonnot furnished a 1936 5" TV for an added interest.



Irv Tjomsland is shown here going iron monster and demonstrating that it is still in working condition after 10 years. Over 500 dealers and technicians attended the program.

## ERA Holds Conference Feb. 6-9 O'Halloran Named As New Prexy



JOHN O'HALLORAN

The Southern California Chapter of the Electronic Representatives Association will hold its bi-annual conference in Palm Springs on February 6-9.

This event brings together many of the nation's top manufacturers, manufacturers representatives and distributors to iron out problems and to set up sales programs.

According to chairman Mark Mark-

man, "we expect over 500 to attend this conference and have planned an exciting as well as productive four days."

It was announced at the same time that John O'Halloran, President of O'Holloran Associates has been elected as the new President of this chapter of ERA. Elected at the same time were M. A. Stolaroff, President of M. A. Stelaroff Company as Vice President and Ellard E. Strassner, President of Ellard E. Strassner Company, as Treasurer. Jack Carter is the outgoing President of the group.

#### Carl Huber Named As Manager Of Phileo Parts Div.

Carl Huber, district representative for Philco's 16 western states parts and accessory division, has been named as Manager of the Parts and Service Division in Southern California.

Huber, who has been with Philco for over 16 years, is well known and well liked by dealers throughout the Southern California area. Previous to his joining Philco he had been with Gough Industries at a time when they held the Philco distributorship.

According to Huber, "we intend to make this area one of the top Philco operations in the nation through an aggressive sales incentive approach with the dealers.

## DUNBAR

- Manufactured in the West's Newest Most Modern Tube Factory!

#### **BONDED FACE PICTURE TUBES**

They said it couldn't be done . . but DUNBAR is doing it! The first independent tube plant to de-laminate and laminate bonded face picture tubes. Old plates removed, new plates replaced. Tubes processed electrically. 1 YEAR GUARANTEE.

SPECIAL ANY 23" BONDED TUBE \$27.50 EX. REGULAR \$32.50

WRITE FOR PRICE LIST

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DUNBAR SALES CO.

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#### USED—TV'S

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#### PARTS BARGAINS

Indoor TV Antennas..... ....68¢ ea. Cheeter Cords..... Plastic Tape (30 ft, rolls)... .....25¢ ea. #47 Pilot Lamps..... ... 6¢ ea. 7.5 Ol-IM fused resistors...... .. 10¢ ea Receiving tubes-all numbers 70% off

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Los Angeles 6, Calif. RE 1-6991

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TO PLACE AN AD

BY PHONE: in Los Angeles coll 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 MODERN ELECTRONIC SERVICE Classified Dept., 4041 Marlton Ave., Los Angeles 8, Calif.

RATES

95c 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. Same conv 15% each, Same copy. **HEADLINES, ETC.:** Large headlines, box borders and 2-col. ads available

at modest charge.
"POSITION WANTED": Less 15%, payable in advance

#### FOR SALE

FOR SALE T.V. RENTAL BUSINESS 150 SETS

Grosses \$1,500-\$2,000 Mo.

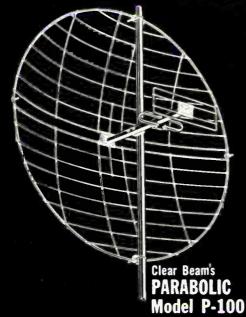
TEL-RADIO SERVICE 5811 SUNSET BLVD. Los Angeles 28, California

#### BUY

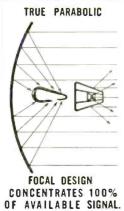
SELL

TRADE

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## New, from Clear Beam UHF Research



Focusing screen selects directional signal ... Rejects ghosts.

Unique parabolic "big screen" design, single dipole feature, and all metallic construction provide maximum performance even in the toughest fringe and translator UHF areas. Prevents signal loss caused by weather deterioration and phasing harness mismatch. Preassembled screen and dipole for fast, strong installation! Up to 18 db gain. Proven the most powerful UHF antenna ever designed!

> Ask your distributor or write today for technical bulletin

#### FOR THE BEST • UHF RESEARCH **UHF DESIGN • UHF PERFORMANCE • CLEAR BEAM**

Through continuing research and nationwide evaluation of problems in UHF areas, Clear Beam brings you the widest selection of proven UHF designs. Clear Beam's UHF antennas have been field tested in every type of UHF reception area to assure you maximum performance, maximum profits!



**CLEAR BEAM ANTENNA CORPORATION** 

21341 Roscoe Boulevard • Canoga Park, California

### Petition to Outlaw Pay TV Approved

An initiative petition designated to outlaw development of pay television in California was approved a few weeks ago. The measure, which requires 458,-259 signatures to qualify for submission to the voters in November, seeks repeal of amendments to the Revenue and Taxation Code passed by the 1963 legislature. Those established pay TV legally and set maximum taxes chargeable by state and local governments at 1% of the quarterly gross received from subscriptions.

The initiative would declare development of subscription television "against public policy" and forbid any charges to the public for programs transmitted to home television sets.

Chief proponent of the measure is the United California Theaters and the California Crusade for Free TV. These groups feel it is important that the people decide if they want their TV to remain free.

## Electra Introduces New Portable TV For Service Dealer Sales

LA CANADA, CALIF.—A new line of portable television sets has been introduced by Electra International Company of La Canada, California, under a unique new marketing program aimed at bringing highest quality imported portables to the consumer, directly through their neighborhood T.V. service dealer.

It will be available only through servicing dealers on a direct one-step basis.

All black and white models will retail for less than \$100.

All models will carry an optional one year warranty in addition to the conventional 90-day warranty.

a next day delivery basis through-All parts and sets will be available on out most of California and Arizona and two days in remainder of the 11 western states.

The first set to be marketed is an 8" portable which will carry a suggested retail price of \$84.50. It is an AC set which has Los Angeles City approval. It can also be operated on 12 volts DC with an optional converter which will permit use outdoors, or in cars, campers, boats, etc....at a cost far below that of the smaller screen transistorized models.

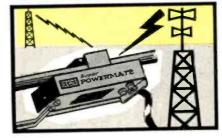
# **NEW TWIN-TRANSISTOR** SUPER POWERM POWERMATE

## BREAKS THE GAIN/OVERLOAD BARRIER

Servicemen and the public long wanted it, but were told they couldn't have it—a transistorized TV antenna preamplifier with the overload capacity to handle local signals without sacrificing the gain that brings in distant stations.

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