### MODERN



# electronic service dealer

THE OFFICIAL PUBLICATION OF THE CALIFORNIA STATE ELECTRONICS ASSOCIATION

VOL. 3, NO. 1

MAY, 1963



IN THIS ISSUE:

Louise Miller . . . 25 Years as an Electronic Distributor . . Page 15 Senate Bill 1292 Requires All Service Dealers to Register . . . Page 12 COLOR CUES . . . A Check Chart for Color Servicing . . . Page 21

# no question about it-

# the IS A WINNER

# **"6 db BETTER**

If you are installing JFD Log Periodic LPV's, no doubt you will agree with this report from R. L. Monroe, a leading TV antenna service-dealer of Charleston, West Virginia-a problem reception area.

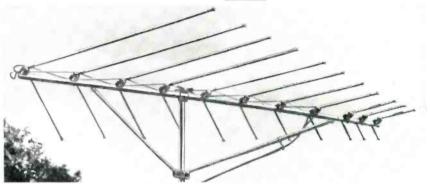
"It beats all, it beats everything that I have ever seen. Not only that, but this antenna is better than 6 db better than the best that I have installed. It pulled in a consistently clear picture from Columbus, over 130 miles away. \*\*\* \*\*\* \*\*\* "It's just great on color -turns browns into real reds, faded bluish greens into brilliant greens, and completely eliminates the chronic ghost problems we have been suffering from in this area."

\*\*\* I have been in this business since 1948, which is a considerable time, particularly in the valley, and have yet to see any antenna, even near to this log periodic antenna in performance of the things I have wanted."

## Why the JFD Log Periodic LPV Outperforms Every TV Antenna Ever Made!

The log-periodic LPV blows the whistle on cumbersome antennas with their "Chinese puzzle" combinations of collectors, directors and reflectors. Now a single precisely-engineered antenna-the first based on a geometrically-derived logarithmic scale - actually tunes itself to the desired channel for unprecedented performance in crisp black and white or stunning color-plus FM STEREO. Is it any wonder that never before have so many installers and technicians so quickly acclaimed a TV antenna?

We would like to tell you more about the LPV, and how its frequency independent characteristics, have broken through distance, ghost and interference barriers to bring clear, steady pictures into previously "impossible" areas. Write today for your log periodic LPV Sales Kit. Better yet, call your JFD distributor and try one with our money-back guarantee of a better picture. You will prove it to yourself.



Developed by the University of Illinois Antenna Laboratory—Now Serving in Satellite Telemetry—Adopted to TV by JFD! THE LOG PERIODIC LPV ENDS THE ERA OF ANTENNA COMPROMISE! FOR THE FIRST TIME ONE SCIENTIFICALLY FORMULATED ANTENNA CON-FIGURATION SATISFIES ANY LOCATION DEMAND:

Harmonically resonant V-element operate on the Log-Periodic Cellular Principle in the Fundamental and Third Harmonic Modes for unprecedented performance -in color-in black and white-plus FM STEREO

\$59.95, list LPV17: 18 Active Cell and Director System—up to 175 miles \$49.95, list LPV14: 15 Active Cell and Director System—up to 150 miles \$39.95, list LPV11: 11 Active Cell and Director System-up to 125 miles LPV8: \$29.95, list 8 Active Cell and Director System-up to 100 miles

LPV6: 6 Active Cell System-up to 75 miles \$21.95, list \$14.95, list LPV4: 4 Active Cell System-up to 50 miles





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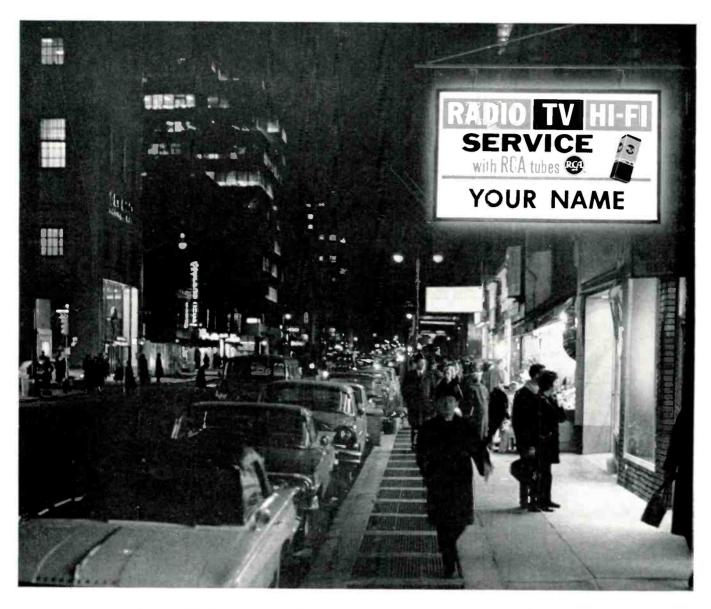
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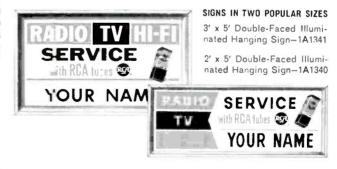
WESTERN RADIO & TV SUPPLY, INC.



## Let RCA put your name in lights

Put a bright new face on your store front with a striking illuminated outdoor hanging RCA business sign. Through Authorized RCA Tube Distributors, RCA offers you a choice of two new double-faced illuminated shop signs imprinted with your business name. Made of weatherproof translucent plastic, RCA business signs:

- Brighten your entire shop front
- Give your business a smart, modern, efficient appearance
- Focus attention on your services
- Fix your shop location in the minds of potential customers
- Associate your business with the prestige and customer acceptance of RCA-the most trusted name in electronics



Find out now how you can get yours. Your participating Authorized RCA Electron Tube Distributor has all the facts. Call him today.

RCA ELECTRON TUBE DIVISION, HARRISON, N. J.





MODERN

## electronic ervice de

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

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#### FEATURE ARTICLES

- 12 Complete Text of Registration Bill SB 1292
- Louise Miller . . . 25 Years As An Electronic Distributor by Don Martin (A Distributor of the Month Special Feature)
- Why A CTC-4 Check Chart?
- Color Clues . . . The First Color Servicing Check Chart Ever Produced By Irving Tjomsland

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#### COVER

Mrs. Louise Miller is pictured on this month's cover. Miller's Radio and Television Supply, Inc. is celebrating its 25th Anniversary as an Electronic Distributor in Oakland, California. It is a pleasure to honor this fine firm, and Mrs. Miller, as our Distributor of the Month.



Now, through continuous Winegard research, a new, improved Electro-Lens yagi has been developed—the New WINEGARD COLORTRON—PERFECT ANTENNA FOR COLOR TV!

Colortrons have a flat frequency response (plus or minus 1/2 DB across any 6 MC channel), no "suck-outs" or "roll-off" on end of bands . . . accurate 300 ohm match (VSWR 1.5 to 1 or better) . . . unilobe directivity for maximum ghost and interference rejection. They deliver today's finest color reception, give a new picture quality to black and white. Colortrons are the only outside antennas that carry a WRITTEN FACTORY GUARANTEE OF PERFORMANCE.

And Colortrons are built to last. High tensile aluminum tubing for rigidity and stability, insulators with triple moisture barrier, GOLD ANODIZED for complete corrosion-proofing.

There are 4 Colortron models to cover every reception need, from suburbs to distant fringe areas ... \$24.95 to \$64.95 list.

New Winegard Colortron twin-nuvistor amplifier perfectly matches Colortron antennas. Gives added gain and sensitivity on both color and black and white. Ultra-low noise, high

gain Colortron Nuvistor Amplifier can easily drive 6 or more

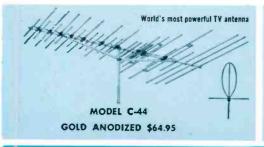
With revolutionary twin-nuvistor circuit, Colortron amplifiers can handle up to 400,000 micro-volts of signal without overloading. This is 20 times better than any single transistor amplifier. The Colortron Amplifier will bring the weakest signals up out of the snow, yet strong local TV & FM signals will not overload it. A special life saver circuit gives the two nuvistors a life of 5 to 8 years.

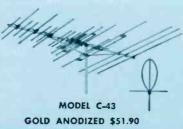
This amplifier is completely trouble free and the finest performing antenna amplifier you can own.

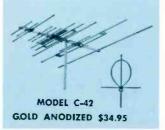
Completely weather sealed, nothing is exposed to corrode and cause trouble . . . has all AC power supply with 2 set coupler. (Model No. AP-220N, \$39.95 list). Twin transistor model also available up to 80,000 micro-volts input. New type circuit protects transistor from static electricity built up in lightning flashes. (Model No. AP-220T, \$39.95 list).

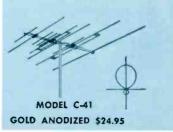
Colortron Amplifier can be added to any good TV antenna for sharper, clearer TV reception.

Ask your distributor or write for technical bulletin.











#### LETTERS TO THE EDITOR:

## More on Contractors License for System Installers

Dear Mr. Martin:

One of the members of Association of Electronics Systems Contractors brought the March, 1963 copy of M.E.S.D. to our last meeting. After lively discussion about the editorial on page 4 entitled "Caution to Sound and Antenna System Dealers," I was advised to write this letter to you.

You state that "anyone doing a sound of antenna installation that has a cost of over \$100 must be licensed under this section in order to do this type of work." We have a slightly different interpretation of the law in this regard. I quote from a letter to me, dated February 21, 1962, frm Leo B. Hoschler, Registrar of Contractors:

"Your letter indicates that these television antenna will be put on new (sic) construction; therefore, regardless of the price the installer will have to be licensed. Section 7048 of the Business and Professions Code reads in part as follows:

'This chapter does not apply to any work or operation on one undertaking or project by one or more contracts, the aggregate contract price for which for labor, materials, and all other items, is less than one hundred dollars (\$100), such work or operations being considered as of casual, minor or inconsequential nature."

"Since the new construction will be over \$100, even though the installation of the antenna may be \$50 or \$75, the person installing such antenna would be required to be licensed. In fact, all contractors working on new construction are required to be licensed."

We agree that most electrical and general contractors have little knowledge of this type of installation. This is why a specialty license exists for this field. It is our feeling that mass licensing is not an answer. There is a good deal more involved in contracting than simply a knowledge of electronics. One must be a contractor in order to act as a sub-contractor. One has to be able to read and decipher blueprints, understand bidding technique, have ample monetary backlog when involved in larger subcontracts, have an understanding of the legal phase of contracting, he able to perfect a lien, have adequate insurance, be able to deal with unions, be aware of construction standards, and be properly equipped. To blanket license people or allow anyone to install electronic specialty items

as a contractor will lead to improper installation and price cutting (to an unreasonable extent).

We feel that anyone doing this type of work owes it to himself to investigate licensing and many other aspects of contracting and contractor responsibilities.

> Sincerely yours, Richard E. Linebarger Secretary

Editor's Note: I now give up on trying to find the real information concerning this problem. It seems that the different people within the license department can't really come up with a solid answer so we will publish all things presented to us in this regard and hope it will be of benefit to the Industry. Thanks so much for your interest and help.

Dear Sirs:

At the end of February we wrote your office to discontinue running our ad and to bill us at 208 main in Weed, California. We would like to repeat this request and enclosed is our check to cover February and March.

Thank you for running our ad. To date your magazine classified section resulted in about one inquiry a month. We have now discontinued our business; however for some unknown reason after we closed we received several inquiries!

Your magazine has steadily improved since its first inception a few short years ago. We have enjoyed reading it and learning the progress of fraternity within the electronics industry in California.

Sincerely.

F. S. Brockway. O. D.

#### Open and Closed Trade Mark Yellow Page Advertising Explained

Dear Mr. Martin:

Mr. Johonnot requested we outline the two plans of accepting and selling Trade Mark advertising. Plan No. I

The owner of the Trade Mark may purchase a Trade Mark Heading and all the listings of the authorized members or dealers. In this way the owner may exercise complete control of all listings appearing under the Trade Mark. The entire charge for the Trade Mark Heading and listings would be contracted by and billed to the owner. We call this a closed Trade Mark arrangement.

When the owner purchase the Trade Mark Heading but not the listings, we call this an open Trade Mark. The Company, under this arrangement, will accept listings from dealers of a product or service when they tell us they are a member of an association or dealer of a product.

We recommend your association purchase your Trade Mark and member listings on a closed basis. This arrangement will solve your current problem and assure that only the members you contract for will appear under your Association Trade Mark Heading.

If you have any questions regarding this matter, please feel free to sall us.

Sincerely, A. E. Jaynes Directory Sales Manager.

Editor's Note: Thank you very much for this information, Mr. Jaynes. I'm sure it will be of value to our Association in setting up their ad programs. You may be interested to know that, through a recent survey we just completed, the TV service industry is spending a considerable amount of money on this type of advertising and the cooperation we are now receiving from your office should have its affect in future programs.

#### BOOKLET REQUESTS

Dear Editor:

Please send me a free copy of Sarkes-Tarizian booklet on Selenium, Silicon, and Silicon Control Circuits.

Thank you.
Truly yours,
A. W. Weston
Weston's Radio &
Television Service

Dear Don:

Thanks for the blooper on my name—correction is Eugene Orrico and George Ponsolle. See—we did notice!

Please send copy of Selenium, Silicon and Silicon Control Circuits by Sarkes-Tarizian.

Thanks, "Gene" Orrico

Dear Sir:

Please send me a copy of the Sarkes-Tarizian booklet on Selenium, Silicon & Silicon Control Circuits mentioned in the March, 1963 edition of MESD. Thanks—and keep up the good work.

> Bill Tanner Westchester Television Sales & Service

Editor's Note:

Over the last few weeks we have received over 30 requests for this booklet that was used, in part, for the March Issue article "Let's look at the Selenium-Silicon Controversy." By this time, all of these requests have been referred to Sarkes-Tarizian and anyone else wishing to acquire this material should drop us a post card and we will be happy to take care of getting this material to you.





DON MARTIN

### TV DEALER REGISTRATION BILL INTRODUCED IN STATE SENATE

The news we have all been waiting for has finally been made with the annuocement that Senator Alan Short of Stockton has introduced the CSEA backed "Registration Bill" in Sacramento.

According to statements made by Senator Short, "This is essentially a policing proposal not a licensing bill. It is aimed at protecting the public against repairmen who take advantage of the public's lack of knowledge and bilk the consumers." The bill, if passed, would: 1. require the registration of electronic repair service dealers with a provision for spot checking repairmen. 2. Penalties for fraudulent, deceptive or grossly incompetent practices, including false or mis-leading advertising, 3. Machinery for consumers to make complaints directly to the state and obtain speedy, informal settlements. 4. Recourse to court injunction to prevent dealers from continuing illegal practices.

Senator Short also stated this program would be financed through the fee structure for registration and would not be a drain on the taxpayers.

Actually, the bill would create a bureau of electronic repair dealers within the Department of Professional and Vocational Standards and has been given the number of SB 1292.

As an open letter to the State Administration I would like to point out that the Industry, as a whole, has done a great deal in its own behalf to protect the consumer from fraud-Over the past few years the California State Electronic Association has been able to make known to editors and publishers of leading newspapers throughout the State that their acceptance of "no-fix no-pay", "\$.99 House Calls," etc. was nothing short of a come-on to cheat their readers.

Many of these newspapers such as the Los Angeles Times, then took action and refused this type of advertising. The biggest problem the industry faced was the Yellow Page Advertising where this type of advertising was prominent. In fact, some of the worst offenders used this medium extensively and dominated it with different Company names but the same phone numbers. Today, through the efforts of the Association, the Yellow Pages are almost free of this type of advertising and should be completely free by the next issue. This was accomplished through a co-operative effort with the Yellow Page people and through the Public Utility Commission who passed new regulations requiring that all advertising placed in the Yellow Pages, that might require the removal of the appliance or TV from homes, must have a business address.

The Association has worked very closely with the Attorney General's Office, Miss Helen Nelson of the Governor's Council and with Better Business Bureaus throughout the State. In my opinion, everything possible has been done to clean up the industry with the last remaining item being the mandatory regstration of service repairmen.

I want to thank Governor Brown, Senator Short, Mrs. Helen Nelson and Attorney General Stanley Mosk for their consideration and help over the past two years in making everyone more conscience of what has been happening in our Industry and what can be done to protect the consuming public.

## INTEREST MOUNTING ON POSSIBLE NATIONAL ASSOCIATION

Although labeled pre-mature, and we certainly agree, there has been a lot of comment concerning the possibility of forming a national Association of State Associations. This would be more like a Federation to accomplish matters of general national interest and in no way would any State group lose its identity. It seems like good sense to me that such a working Association could be formed but, if there was some objection to a formal Federation, it could be one of general information. What could be done would be to hold an annual meeting of different State Presidents, 1st Vice Presidents, and Executive Secretaries on an alternating basis between the East, Mid-West and Far-West, At these annual meetings ideas, samples of By-laws, Public Relations Programs. Common problems of the service industry, etc. could be discussed and this exchange could be reported back to the different State organizations.

At the present time, the CSEA Board of Directors has endorsed the idea of a National Association of State Associations. However, the details of how it would work are far from being completed and it looks as if there are many months of preparation to come before any concrete proposal could be made to the individual State memberships.

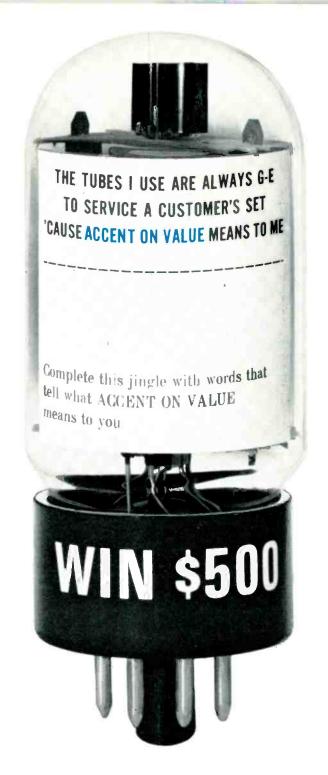
The success of CSEA, in its fight to build a better electronic servicing profession in California, could very well be the guiding light in forming such a national group. The individual problems of the servicing industry today are not local in nature. What happens to dealers in Illinois, New York or Wisconsin has some effect on we in California. The service industry is and has a national image. What we do in California will have its effect elsewhere and the need for a national coordination of activities is essential to the industry as a whole. The idea is good . . . lets all work together to make it a reality.

#### NO PETSHOW IN 1964

During the last few months the Board of Directors of the Pacific Electronic Trade Show have met many times to take under consideration comments concerning the PETS program. As all of you know, no one has been really satisfied with the results of PETS and what it was supposed to do. The Dealers felt it was an Industrial Show and the Industrial people thought it was a Dealer Show. All in all, it didn't seem to satisfy the original idea of serving Distributor's customers.

The final outcome of these meetings was the elimination of an exhibit type show for 1964. Instead, PETS will provide a Distributor Only type seminar program keyed to distributor salesmen. It will be held just prior to the semi-annual Electronic Representatives Association Palm Springs Conference in February of 1964.

The following year, 1965, the Pacific Electronic Trade Show Board of Directors will present a completely Dealer Show and will do everything possible to make it a success. Plans for this activity will be started immediately and will probably be held every other year on an alternating basis with the ERA Palm Springs program.



Enter General Electric's ONE-O-ONE Contest. 101 prizes given every month...\$10 to \$100 with a Grand Prize of \$500 in cash. See your General Electric tube distributor for complete rules and official entry blank.

Get this book FREE with the purchase of G-E tubes. Here's 101 Tele-Clues to help make TV repair easier and more profit-



able for you. Your General Electric tube distributor will give it to you free in appreciation of your purchase of G-E tubes and electronic equipment. Enter the ONE-O-ONE Contest. Get 101 Tele-Clues. See your General Electric Distributor today.

Progress Is Our Most Important Product



Another Accent on Value from G-E ELECTRONICS Distributors

CONTACT ANY OF THE FOLLOWING DISTRIBUTORS:

#### JACK C. ARBUCKLE CO. ANDREWS ELECTRONICS

1500 W. Burbank Blvd., Burbank

#### COOK ELECTRONICS 210 E. Hardy St., Inglewood

#### WHOLESALE ELECTRONIC SUPPLY

#### **WESTERN RADIO &** TV SUPPLY, INC. 1415 India Street, San Diego

5901 Mission Street, San Francisco KIESUB CORP.

EDISCO, INC.

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

2349 Kern St., Fresno 500 East 19th, Bakersfield

#### **MILLERS RADIO &** TV SUPPLY, INC.

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

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



# CSEA NEWS WIRE

\* dates

\* dealer news

\* programs

#### CSFA Insurance Co. Raises CSEA Rates

It has recently been disclosed that the CSEA Comparative Insurance Plan for CSEA members and their families has raised its monthly rates by a 10% increase.

The following statistics outline the rate increase of the group insurance program, compared with last years rates: Single person only—\$8.35; Husband and Wife — \$18.52; Husband, Wife, and child or children—\$23.36; Spouse and child—\$13.19.

Previous rates ran \$7.28 for a single person only; \$16.12 for Husband and Wife; \$20.15 for Husband, Wife, and child or children; \$10.31 for Spouse and child.

The plan includes \$1,000.00 life insurance coverage, \$1,000.00 Accidental Death and Dismemberment, and 10,000.00 maximum major medical benefit.

# Zone "B" Council Upcoming Bill

At the recent monthly meeting of the Zone "B" Council of CSEA, President Claire W. Lanam lead a discussion concerning State legislation of an upcoming bill affecting the industry.

It is probable that the new bill will be introduced by State Senator Short of San Joaquin County, and will contain many points, beneficial to both the industry and the consumer. The foremost advantage of the bill would be the registration of all those individuals who do commercial service work.

Legislation will be backed by State Consumer Counsel. Helen Nelson, who holds office by appointment of the Governor, the connotation is given that he, too, will act as a supporter.

Charles Johnson, executive secretary of the San Francisco Association questioned the need of pre-publicity and possible necessity of lobby work was suggested by Raymond E. Morris, executive secretary of the San Mateo County Association. The general opinion concerning this matter tended to believe that such suggestions were a little too premature. Lanam went on to state that he would look into the matter further. Lanam, CSEA Director Darrell Petzwall of Sacramento, and Keith Kerstein are presently making contacts to help steer the bill.

## Delegates to Meet June 8th In Fresno Board on June 9th

## CSEA Chapters Hold Joint Installation

The Pasadena & Burbank-Glendale Chapters of CSEA held a joint Installation-Dinner Dance at the Huntington Sheraton Hotel, March 30, where Ralph Johonnet served as Master of Ceremonies.

M. A. Birnbaum of the "YELLOW PAGES" told about the effort that is being made to improve their publication, so it can be more beneficial and service-

Dave Wyman, upon being introduced as the outgoing President of the Pasadena Chapter, praised the new officers and received a gift from the Chapter.

Thanking his chapter for its progress, was Everett Pershing, outgoing President of the Glendale-Burbank chapter.

New officers serving Pasadena will be: Bob Kealey, President; Bill Lawler, First Vice President; Chester W. Sheppard, Second Vice President; Bill Schirding, Treasurer; Lee Lopez, Secretary and Board of Directors Ben Leff, Daye Wyaman and Stan Gilkenson.

Incoming officers for Glendale, Burbank are: Buzzy Seal, President; Everett Pershing, Vice President; Ralph Singleton, Secretary; Jim Scarborough, Treasurer; and Board of Directors Tak Kanase, Art Hiaahara, Buzz Diaxon, Joe Pantaleo, and Bill Shott.

Prizes were donated by such companies as Andrews Electronics, Grossman Reynolds, Martin Distributors, Philos, RCA, Radio Products, Sylvania, and Western Electronics.

#### Zone "F" Elects New Board Members

The Zone "F" Council of CSEA has just selected Mr. Ralph Johonnot, Mr. Emmet Mefford and Mr. Robert Whitmore as their representatives on the CSEA Board of Directors for 1963-64.

Mr. Johonnot and Mr. Mefford are presently serving on the State Board of Directors while Mr. Whitmore is the immediate past President of the State Association. AND, after a year's absence, returns to the Board.

The Board of Delegates of the California State Electronics Association will hold its recessed meeting on Saturday June 8th at the Town & Country Hotel in Fresno. California. At this time, they will discuss the proposed change in the election of officers as well as other important items. Following this meeting the present Board of Directors will meet on Sunday. June 9th and conclude the Business for this year. In the afternoon, the newly elected Board of Directors will take office and continue the program of the Association. Unless the Board of Delegates changes the present By-laws in regards to election of State Officers, the new Board of Directors will elect their own Chairman, who becomes the State President, and other official State Officers.

#### Board of Delegates Report Made To Zone "B"

Delegate, Al Munger of the Santa Clara County Chapter of CSEA recently lead discussions concerning the matter of having CSEA officers elected by the Board of Delegates, rather than by the Board of Directors.

This plan would require changes in the CSEA by-laws, which needs twothirds vote of the delegates.

Main complaint of the delegates present was that they had had no notice of any plan suggesting such a change. It was related that any plans for by-law revisions should be submitted in detail to the delegates at least 30 days prior to the vote.

The plan was voted down at this meeting, but is scheduled to come up again at the June 8 meeting in Fresno. Munger commented that many of the delegates felt the proposed change to be unwieldy, not in conformity with long accepted practice, and open to possible inner politics detrimental to the good of CSEA as a whole.





CLAIRE W. LANAM

# Let's All Take Immediate Action On SB 1292

The time has come for you to act. Senate Bill 1292 has been introduced. Referred to Committee on Business & Professions.

So now, this is what we—and you delegates, are supposed to be doing. Write letters to Senator Alan Short approving of the certification bill he has introduced in the Senate April 18th. This is our bill that we have worked on with the authorities for so long.

But you must prove to Senator Short and all others, that we are solidly behind this bill. Write letters to the Senator, get other business people, friends, politicians and your customers to write and approve this bill. This is a must. Upon you and you only will fall the responsibility of backing this bill in such numbers that it will go through.

This is your destiny, not finding faults internally, or letting a few mislead you, you are to smart for that. Now is the time to cut out dissension and go to work, as it will take long, hard hours to accomplish this. We must drop everything and all of us apply all our spare

### Promotional Idea Proven Beneficial

Local association advertising was again discussed at a recent meeting of Zone "B" Council of CSEA. The promotional idea pioneered by the Santa Clara Chapters has proven to be most beneficial.

Council Chairman, Melvin R. Haury displayed the Chapters' weekly advertisement, with its catch heading and listing of supporting membership.

Al Munger reported that during the week following the first of such advertisements he received five new customers

Stockton and Sacramento have had similar promotions for some time. ACTRA started this April in the Sunday TV Section of the "Oakland Tribune." time and effort. We are needed.

After the letters to Senator Short, we must have a flood of letters to the committee that SB 1292, Electronic TV Bill, will be assigned to.

This procedure is so imperative, it lets everyone know that we and others are behind the bill, that the success can only come if you work, and work you must. It is up to you.

C. W. Lanam, President

# 23 Members Sign For New Ad Campaign

The ACTRA has recently disclosed that 23 members have signed up for the newly organized advertising plan, which hopes to let the public know "just who they are and what they stand for."

Advertising will begin in April and will be running for a four-week period of four Sunday ads in the TV section of the "Oakland Tribune." Those ACTRA members lying outside the zone of the "Tribune" will probably carry on in their local papers.

The format will be as follows: The ACTRA insignia at the left, with a few lines of the "self-policing" program and its backing by authorities on the right. Beneath the bottom line of the heading, "Certified Chapter of the California State Electronics Assn., Inc.," will appear.



#### (OAKLAND, cent.) ALAMEDA Ben's Radio & TV 1804 Webster - 1303 Park LA 3-6601-LA 3-5500 East Bay TV Service 6136 Foothill Blvd. - LO 9-1133 Gordon's Televisien 7855 MacArthur Blvd. LO 9-1022 BERKELEY Central Electronics 3238 Adelino OL 2-3670 Granada Radio & TV 8835 E. 14th St. TR 2-2483 Gregory Bros. Lakeview TV & Auto Radio 3060 Broadway Hi 4-8855 1896 Solano Ave. Lanam Radio & TV 2466 Shattuck Ave. TH 3-4602 Louie's Radio & TV Sales & Ser. 6132 Foothill Blvd. LO 2-4565 Seay's Radio & TV 1771 Alcatraz - OL 3-3707 9303 E. 14th - LO 2-3588 Lovier's TV Service 1301 Fruitvale Avenue KE 2-8765 Pay-Less TV Service Co. 4735 Foothill Blvd. KE 3-3624 CASTRO VALLEY - HAYWARD Home Center TV & Radio 2731 C. V. Blvd.-LU 2-2732 22679 Watkins - JE 7-1151 Sam's Radio & TV Service 2676 Fruitvale Ave. AN 1-4752 OAKLAND Strong's Metropolitan TV Service 61 Agnes St. - Ot. 3-1333 Advanced TV Service 5804 Foothill Blvd. LO 9-1553 Styles TV & Badlo 2068 Antioch Court OL 8-5400 Associated Electronics, Inc. 4214 Park Blvd. - AN 1-3255 3306 Lakeshore - TW 3-4000 SAN LEANDRO

THIS IS AN EXAMPLE of the kind of advertising co-operative program being sponsored by the ACTRA chapter of CSEA. An ad, similar to this one, will be running on a regular basis in the Oakland Tribune and is a good example of what can and should be done by every chapter in the state.

Dick Seene TV 3207 E. 14th St. - KE 3-6558 1715 150th Ave. - EL-1-1112

CHAPTER OFFICES SAN DIEGO #13 3318 Idlewild Way 274-2320 San Diego 17

NORTH COUNTY #18 1930 S. Santa Fe Ave Vista, Calif.

#### California State Electronics Association

### SAN DIEGO NEWS

NEXT MEETING
CHAPTER 13
To Be Announced
CHAPTER 18
TO BE ANNOUNCEO

VOL. 2, NO. 8

MAY, 1963

Editor: ED FORT, JR.

#### SPECIAL MEETING TO BE SET TO DISCUSS REGISTRATION BILL

As soon as we have a copy of the new bill at our office there will be an industry meeting both in the San Diego and North County areas.

Everyone should be vitally interested because it will affect your entire future in the electronic industry. Watch your mails for the announcement as to time and place. Don't miss it.

#### YE OLDE PROVERB

Between the great things we cannot do and the small things we will not do, the danger is that we shall do nothing.

> SAN DIEGO BUSINESS INDEX HITS 80% IN MARCH

# CHAPTER 13 MOVES TO NEW OFFICE; NAME NEW SECRETARY

It's with a great deal of regret that I make this announcement. Trudy Lowell has found it necessary to resign as of April first, and I for one will be lost without her.

As Secretary, Treasurer of Chapter 13 these past few years; her contributions to the success of our chapter and zone are much too numerous to list here; except to say that there has never been anything requested of her, by any member, that she has not done willingly and well. We'll all miss her. All I can say Trudy is "Thanks."

Our new chapter and zone office is listed above. Mrs. Sylvia Snyder will be the new secretary, treasurer. It's a big job, as Trudy will attest, but I'm sure Sylvia will learn quickly. All correspondence must be sent to our new address.

By the time you read this you have probably already learned that the registration and policing legislation for which we have all been working was introduced in the Senate April the 17th. The State office has done its job well. From now on it's the responsibility of each and everyone of us to see to it that all our

legislators are made aware of our wishes. Let's not drop the ball.

#### LEGISLATORS STATE ASSEMBLYMEN

76th District — Clair W. Burgener, 4921 Southcrest Ave., San Diego 10.

77th District — Richard J. Donovan, 1003 Plaza Blvd., National City.

78th District — E. Richard Barnes. 3027 Poinsettia Dr., San Diego 6.

79th District — James R. Mills, 1718 39th St., San Diego.

80th District — Hale Ashcraft, Linea del Cielo, Rancho Santa Fe. STATE SENATOR

40th District — Jack Schrade, 107 Julian, El Cajon.

#### 1963 EXPIRATION CODE DATES FOR RECEIVING TUBES

| Expires  | Standard* | RCA | Raytheon | Sylvania |
|----------|-----------|-----|----------|----------|
| MAY 31   | 62-22     |     | K-16     | JF       |
| JUNE 30  | 62-26     | MT  | K-14     | JG       |
| JULY 31  | 62-30     | MU  | K-12     | JH       |
| AUG. 31  | 62-35     | MV  | K-10     | 11       |
| SEPT. 30 | 62-39     | MW  | K-08     | JK       |
| OCT. 31  | 62-43     | MX  | K-06     | JL       |
| NOV. 30  | 62-48     | MY  | K-04     | JM       |
| DEC. 31  | 62-52     | MZ  | K-02     | KA       |

\*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.

# SENATE BILL 1292

#### INTRODUCED BY SENATOR SHORT

APRIL 18, 1963

#### REFERRED TO COMMITTEE ON BUSINESS AND PROFESSIONS

NOTE: AS A SERVCE TO THE CALIFORNIA SERVICE INDUSTRY WE HAVE PUBLISH THE COMPLETE BILL

An act to add Chapter 20 Acommencing with Section 8900) to Division 3 of the Business and Profesional Code, relating to the registration and regulation of electronic repair dealers, creating the Bureau of Electronic Repair Dealer Registration, prescribing its organization, power and duties and making appropriation therefor.

The people of the State of Calfornia do enact as follows:

Section 1. Chapter 20 (commencing with Section 9800) is added to Division 3 of the Business and Professions Code, to read:

#### CHAPTER 20. ELECTRONIC REPAIR DEALERS Article 1. General Provisions

9800. This chapter of the Business and Professions Code constitutes the chapter on eletronic repair dealers. It may be cited as the Electronic Repair Dealer Registration Law.

9801. The following terms as used in this chapter have

the meaning expressed in this section:

(a) "Person" includes firm, partnership, association or corporation.

(b) "Department" means the Department of Professional

and Vocational Standards. (c) "Director" means the Director of Professional and

Vocational Standards. (d) "Bureau" means the Bureau of Electronic Repair Dealer Registration.

(e) "Chief" means the Chief of the Bureau of Electronic

Repair Dealer Registration.

(f) "Board" means the Advisory Board, Bureau of Electronic Repair Dealer Registration.

(g) "Service dealer" means a person who, for compensation, engages in the business of repairing, servicing, or maintaining television, radio, or phonograph equipment normally used or sold for use in the home.

(h) "Complainant" means the customer of a service dealer who has complained to the director concerning such service

dealer.

9802. This chapter does not apply to:

(a) Any employee of a service dealer if the employee repairs, services or maintains television, radio, or phonograph equipment for compensation only as such an em ployee.

(b) The repair, service, or maintenance of equipment used in commercial, industrial, or governmental establishments.

When the installation of any television, radio, or phonograph equipment involves a function which is subject to the provisions of Chapter 9 (commencing with Section

7000) of Division 3 of this code, such function shall be performed by a person who is licensed pursuant thereto.

9804. No person who is licensed pursuant to Chapter 9 (commencing with Section 7000) of Division 3 of this code shall be required to register under this chapter if such person's activities are within the scope of his license; nor shall such person be prohibited from repairing, servicing, or maintaining equipment of any type, the nstallation of which may be performed under his license.

No person registered under this chapter shall be required to apply for a license pursuant to Chapter 9 (commencing with Section 7000) of Division 3 of this code if such person's activities consist only of repairing, servicing, or maintaining televisions, radio, and phonographic equipment

normally used or sold for use in the home.

#### Article 2. Administration

9810. There is in the Department of Professional and Vocational Standards a Bureau of Electronic Repair Dealer Registration under the supervision and control of the director. The director shall administer and enforce the provisions of this chapter.

The Governor shall appoint, subject to confirmation by the Senate, a chief of the bureau at a salary to be fixed and determined by the director with the approval of the Director of Finance. The chief shall serve under the direction and supervision of the director and at the pleasure of the Gov-

Before a chief is appointed, the Governor shall give due consideration to any person or persons recommended by the

Every power granted to or duty imposed upon the director under this chapter may be exercised or performed in the name of the director by a deputy or assistant director or by the chief, subject to such conditions and limitations as

the director may prescribe.

9811. The director, in accordance with the State Civil Service Act, may appoint and fix the compensation of such clerical, inspection, investigation, and auditing personnel as well as an assistant chief, as may be necessary to carry out the provisions of this chapter. All such personnel shall perform their respective duties under the supervision and the direction of the chief.

(Continued on Next Page)

#### **SENATE BILL 1292**

(Continued from Page 12)

- 9812. The director shall gather evidence of violations of this chapter and of any regulation established hereunder, by any service dealer, whether registered or not, and by any employee, partner, officer, or member of any service dealer. The director shall, on his own initiative, conduct spot check investigations of service dealers throughout the State on a continuous basis.
- 9813. The director shall have the powers granted to the head of a department by, and shall conform to the provisions of Article 2 (commencing with Section 11180) of Chapter 2 of Division 3 of Title 2 of the Government Code.
- 9814. The director may establish and enforce such regulations as may be reasonable for the conduct of service dealers and for the general enforcement of the various provisions of this chapter in the protection of the public. The director shall distribute to each registered service dealer copies of this chapter and of the regulations thereunder. Such regulations shall be adopted, amended, or repealed in accordance with the provisions of Chapter 4.5 (commencing with Section 11371) of Part 1 of Division 3 of Title 2 of the Government Code.
- 9815. The director shall keep a complete record of all registered service dealers and shall annually prepare a roster showing the names and addresses of all registered service dealers. A copy of the roster shall be made available to any person requesting it upon the payment of such sum as shall be established by the director as sufficient to cover the costs thereof.
- 9816. The director shall submit to the Governor, during the month of December prior to each general session of the Legislature, a full and accurate report of the activities of the bureau during the preceding two years, including a complete statement of the receipts and expenditures of the bureau during that period. A copy of such report shall be filed with the Secretary of State.
- 9817. There is in the bureau an advisory board which consists of five members appointed by the Governor subject to confirmation by the Senate.
- 9818. The first members of the board shall be appointed within 60 days from and after the effective date of this chapter.
- 9819. Each member of the board shall be appointed for a term of four years and shall hold office until the appointment and qualification of his successor or until six months shall have elapsed since the expiration of the term for which he was appointed, whichever first occurs.

The terms of the members of the board first appointed shall expire as follows: one member, January 15, 1965; two members, January 15, 1966; two members, January 15, 1967. The terms shall thereafter expire in the same relative order. Vacancies occurring shall be filled by appointment to the unexpired term.

- 9820. Three members of the advisory board shall be selected to represent the public and two members shall be selected from the radio, phonograph, and television repair industry.
- 9821. The board shall meet at least twice a year. Additional meetings may be held upon the call of the president or at written request of any two members of the board.

The board shall elect from its members each for a term of one year, a president and a vice president, and may appoint such committees as it deems necessary to carry out its duties. 9822. Each member of the board shall receive a per diem and expenses as provided in Section 103 of this code.

9823. The quorum required for any meeting of the board shall consist of three members, one of which shall be a representative of the radio, phonograph, and television repair industry. No action by the board or its members shall have any effect unless a quorum of the board is present. All meetings of the board shall be open and public.

9824. The chief shall serve ex officio as secretary of the

board but shall not be a member of the board.

9825. The board shall:

- (a) Inquire into the practices of the radio, phonograph, and television repair industry, the functions of the bureau and the matter of the policy thereof, and make such recommendations with respect thereto as after consideration, may be deemed important and necessary for the welfare of the consuming public.
- (b) Confer and advise with the director and chief as to how the bureau may best fulfill its functions.
- (c) Consider and make appropriate recommendations on its own initiative as to changes in, or additions to or deletions of regulations which the director has adopted as, after consideration, may be deemed important and necessary.
- (d) Consider and make appropriate recommendations in all matters submitted to it by the director or the chief.
- (e) Assist the director and the chief in the collection of such necessary information and data as the director or the chief may deem necessary to the proper administration of this chapter.

#### Article 3. Registration Procedure

9830. Each service dealer shall pay the fee required by this chapter for each place of business operated by him in this State and shall register with the director upon forms prescribed by the director. The forms shall contain sufficient information to identify the service dealer, including name, address, retail seller's permit number, if a permit is required under the Sales and Use Tax Law (Part 1, commencing with Section 6001, of Division 2 of the Revenue and Taxation Code), and other identifying data to be prescribed by the director. If the business is to be carried on under a fictitious name, such fictitious name shall be stated. If the service dealer is a partnership, identifying data shall be stated for each partner. If the service dealer is a corporation, data shall be included for each of the officers and directors of the corporation as well as for the individual in charge of each place of the service dealer's business in the State of California, subject to such regulations as the director may make.

9831. Upon receipt of the form properly filled out and receipt of the required fee, the director shall validate the registration and send a proof of such validation to the service dealer. The director shall by regulation prescribe conditions upon which a person whose registration has previously been invalidated or has previously been refused validation, may have his registration validated.

9832. Every registration shall cease to be valid on June 30 of each year unless the service dealer has paid the renewal fee required by this chapter in accordance with regulations issued by the director.

9833. A registration shall cease to be valid when any of the information provided by the form specified in Section 9830 ceases to be current. The director shall make regulations prescribing the procedure for keeping such registration information current.

#### Article 4. Offences Against the Chapter

9840. On or after January 1, 1964, it shall be unlawful to act as service dealer without first having registered in accordance with the provisions of this chapter and unless such registration is currently valid.

9841. The director may refuse to validate, or may invalidate temporarily or permanently the registration of a

service dealer for any of the following acts or omissions done by himself or any employee, partner, officer, or member of the service dealer and related to the conduct of his business:

- (a) Making or authorizing any statement or advertisement which is untrue or misleading, and which is known, or which by the exercise of reasonable care should be known, to be untrue or misleading.
- (b) Making any false promises of a character likely to influence, persuade, or induce a customer to authorize the repair, service, or maintenance of the equipment covered by this chapter.
- (c) Acting for more than one customer in a transaction without the knowledge or consent of all parties thereto.
- (d) Any other conduct which constitutes fraud or dishonest dealing.
  - (e) Conduct constituting gross negligence.
- (f) Failure in any material respect to comply with the provisions of this chapter or regulations thereunder.
- 9842. All work done by a service dealer shall be recorded on an invoice in such detail as is required by regulations issued by the director and shall describe all service work done and all parts supplied. If any used parts are supplied, the invoice shall clearly state that fact. One copy shall be given to the customer and one copy shall be retained by the service dealer for a period of at least one year.

9843. The service dealer shall return replaced parts to the customer excepting such parts as may be exempted from this requirement by regulations of the director and excepting such parts as the service dealer needs to return to the manufacturer or distributor under a warranty arrangement.

9844. If a customer requests an estimate for labor and parts necessary for a specific job, the service dealer shall make such an estimate in writing and may not charge for work done or parts supplied in excess of the estimate without previous consent of the customer. The service dealer may charge a reasonable fee for making the estimate.

9845. A service dealer may not make the compensation of any employee, partner, officer, or member dependent upon the value of parts replaced in any equipment by, or with the consent of, such employee, partner, officer, or member.

9846. The use of "guarantee" and words of like import shall conform to the regulations adopted by the director.

9817. Each service dealer shall maintain such records as are required by the regulations adopted to carry out the provisions of this chapter. Such records shall be open for reasonable inspection by the director or other law enforcement officials.

9848. All proceedings to refuse to validate and temporarily or permanently to invalidate a registration shall be conducted pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

9849. The expiration of a valid registration shall not deprive the director of jurisdiction to proceed with any investigation or hearing on a cease and desist order against a service dealer or to render a decision invalidating a registration temporarily or permanently.

9850. Any person who fails to comply with the provisions of this chapter is guilty of a misdemeanor and punishable by a fine not exceeding one thousand dollars (\$1,000) or by imprisonment not exceeding six months, or by both such fine and imprisonment.

9851. The superior court in and for the county wherein any person carries on, or attempts to carry on, business as a service dealer in violation of the provisions of this chapter, or any regulation thereunder, shall, on application of the director, issue an injunction or other appropriate order restraining such conduct.

The proceedings under this section shall be governed by Chapter 3 (commencing with Section 525) of Title 7 of Part 2 of the Code of Civil Procedure, except that no undertaking shall be required and the director shall not be required to allege facts necessary to show or tending to show lack of an adequate remedy at law or irreparable injury.

9852. No person required to have a valid registration under the provisions of this chapter shall have the benefit of any lien for labor or materials unless he has such a valid

registration.

Article 5. Informal Adjustment of Complaints

9860. The director shall establish procedures for accepting complaints from the public against any service dealer.

9861. If the complaint does not appear to state any violations of this chapter or of the regulations made pursuant to this chapter, the director shall so advise the complainant and take no further action.

9862. If such a complaint indicates a possible violation of this chapter or of the regulations made pursuant to this chapter, the director shall advise the service dealer of the contents of the complaint and, after the service dealer has had reasonable opportunity to reply thereto, the director shall make a summary investigation of the facts.

9863. If, upon summary investigation, it appears to the director probable that a violation of this chapter, or the regulations thereunder, has occurred, the director, in his discretion, may suggest measures that in the director's judgment would compensate the complainant for the damages he has suffered as a result of the alleged violation. If the service dealer accepts the director's suggestions and performs accordingly, the director shall give such fact due consideration in any subsequent disciplinary proceeding. If the service dealer declines to abide by the suggestions of the director, the director may investigate further and may institute disciplinary proceedings in accordance with the provisions of this chapter.

#### Article 6. Revenue

- 9870. All fees collected pursuant to this chapter shall be paid into the State Treasury to the credit of the Electronic Repair Dealer Registration Fund, which fund is hereby created
- 9871. The director shall report to the State Controller at the beginning of each month, for the month preceding, the amount and source of all revenue received by the bureau pursuant to this chapter, and at that time shall pay the entire amount thereof into the State Treasury for credit to the Electronic Repair Dealer Registration Fund.
- 9872. The money in the Electronic Repair Dealer Registration Fund necessary for the administration of this chapter is hereby continuously appropriated for such purposes. Money in excess of a year and a half's operating cost shall be transferred to the General Fund from the Electronic Repair Dealer Registration Fund.
- 9873. The fees prescribed by this chapter shall be set by the director according to the following schedule:
- (a) The service dealer registration fee is not less than twenty-five dollars (\$25) nor more than fifty dollars (\$50) for each place of business in this State.
- (b) The annual renewal fee for a service dealer registration is not less than twenty-five dollars (\$25) nor more than fifty dollars (\$50) for each place of business in this State, if renewed prior to its expiration date.
- (c) The renewal fee for a registration that is not renewed prior to its expiration date shall be double the renewal fee required for a registration renewal prior to its expiration date.
- 9874. All salaries, expenses, or costs incurred or sustained pursuant to this chapter shall be payable only out of the Electronic Service Dealer Registration Fund.



# MILLERS

RADIO & TELEVISION SUPPLY, INC.

"YOUR FRIENDLY SUPPLY HOUSE"

# Louise Miller.....25 Years As An Electronic Distributor

By DON MARTIN

"Our business has been built on service and friendliness," remarked Louise Miller. "Our slogan is your friendly supply house and we mean just that, we have concentrated on dealer business and always strive to do a good job."

The date of this statement . . . May 1951. The place . . . The May Parts Show. The occasion . . . winner of the honorary jobber of the year, California region, award.

This was some 12 years ago and Louise Miller was celebrating her 13th year as a Parts Jobber in Oakland, Calif. Today she is celebrating her silver anniversary and could easily qualify as the "Outstanding Female Jobber for the past quarter century."

"Yes, she stated. "this was our policy in 1951 as it was in 1938... in 1963 and probably as long as we remain in business. The dealer business, beginning with radio in those early years, is the only thing we really know. We have enjoyed a continual growth and dealer loyalty that has been earned through years of experience. This is what our business has been built on and we have every intention of continuing the policy even though more and more distributors have opened their doors."

One of the first, of her sex, to enter this very "man's world" of electronic distributing. Miller Radio began in 1938 as a National Union Tube Jobber with a customer list of some 13 dealers. The address . . . 188 12th Street in Oakland, consisted of a building measuring 40' by 75' and, in later years, it was necessary to "warehouse" antennas, tubes, etc. on the sidewalk. This, of course, necessitated moving the merchandise out each morning and in each night, but was also a sign of growth.

In January 1943 Louise Miller became the sole owner of Miller's Radio and Television Supply and with it came the headaches and heartaches of trying to run an electronic supply business with no electronic supplies. The war made it necessary for her to travel to the East at least four times a year in order to obtain merhandise.

On one of these trips she was informed that she had been selected to represent a newly formed California chapter of a group known as the National Electronic Distributors Association. This organization itself was new, having been

formed the same year as Miller's, so she didn't know what to expect. She learned a great deal about NEDA in short order and was elected to the National Board of Directors the following year.

"I value very highly the friendships of the men I met on that Board of Directors. They were all men who owned their own businesses and their experience and help was of great benefit to me in the years that followed."

By 1946 Miller's had expanded to eight employees, one of which was Woody Stillman. Yes, it is the same Woody that today carries the title of General Sales Manager and is celebrating his 17th year as a member of the "Miller" family.

#### TELEVISION ARRIVES

The next few years saw the advent of the "one eye'd monster" and with it the quick expansion of the parts industry. New ideas, new parts and new people were all part of that era and it meant further expansion of Miller's.

"In 1948 we had a young counter man by the name of Dave Stegner who is our head buyer today," stated Louise Miller, "and by 1950 our staff had grown to 19 employees. In that year we also realized a dream with the design and

(Continued on Next Page)



THE FIRST MILLER STORE . . . . was so small that much of the inventory had to be stored outside during the day and brought in at night.

**EVERYONE** 

AT

# **JERROLD**

**WISHES TO** 

TAKE THIS

**OPPORTUNITY TO** 

Congratulate

# Louise Miller

and her fine organization

on

# 25 YEARS

Of Electronic Distributing

In California



A subsidiary of THE JERROLD CORPORATION

construction of our own building at 336 East 8th street. The only thing wrong with this move was that we underestimated our potential and in less than two years were adding on additional warehouse facilities."

Woody and Dave are not the only "old timers" still with Miller's. In that same era came Louise Miller's son, Norman, right from the University of Montana and is the present Finished Product Sales Manager. Others include: John Cambra in 1951; Charles Raabe in 1951; Fred Banfield in 1952; Verne Johansen in 1952 and Bob Cochran in 1935; all among the "over 10 year" mark. Four others are ready to break that barrier next year and they include: Jack Davis; Dave Hutchison; Bill Kinney and Irv Kretzer.

The reason for this long association of employees can be traced back to the philosophy of the firm which is to make sure everyone feels he is a part of the over-all picture and his opinion is of importance to its success.

According to Mrs. Miller (now Mrs. Jack Moraes, Jack was a former credit manager for the Miller organization but now owns his own business in Walnut Creek called Nave Electric), "I now have 38 people working with me; I purposely say working with me, as each one is directly responsible for our progress. Each knows there is a chance for advancement in our organization. At our weekly meetings everyone has his say. They solve their own problems, they come forth with new ideas and we discuss new merchandise on an open-up basis. If there was one thing I could pin our success on it would be this type of teamwork."

Expansion of the Miller Radio and Television Supply took on even additional magnitude with the establishment of two branch stores in Richmond and San Leandro, Calif. in the early 50's. Even though these two branches were later closed, because of the firm's ability to service these areas from the main store, it set the stage for the Walnut Creek store that was established in 1950 with Dick Rausher as manager and followed by the Santa Rosa store in 1952 with Bill "Ken" Kinney as manager and John Bowes inside sales.

Business continued to boom and it soon became evident that even the Oakland building was not large enough to accomodate the progress being made and another new building went on the drawing boards. In early 1954 a grand opening was held at the present location of Miller's Radio and Television Supply at 530 East 8th St. containing an area of some 20,000 square feet, in the two story structure. Also added to the firm was new branches in San Francisco, to handle finished product merchandise, and a store in San Jose on a partnership basis with a former employee Bert Lewis. Bert was with Miller's over 11 years before opening the San Jose store.

Miller's Radio and Television Supply today consists of 3 branches plus the main location in Oakland. Each store is self regulated and is supplied from the main store on a regular basis premiting a rigid inventory control and intelligent buying.

#### TWO MILLER BRANCHES





Pictured here are two of the Miller three stores in the Northern California Area. On the left is the Santa Rosa store and on the right is the Walnut Creek store. Miller's Electronic Supply is located in San Jose.



All of the Miller stores are well stocked with fine displays and merchandise. This picture shows some of the displays at the Santa Rosa store. Products as well as parts are handled by Millers.



A complete knowledge of products for sale and an attitude of friendly service is a must for all Miller countermen. Tom Bletsoe is shown here taking care of a customer from Arrow Electronic TV.



A complete inventory is always on hand for the dealers because of a unique system of inventory control. Over a period of time, certain items have been given a turnover number and are constantly re-ordered as needed.

No major decision is made without the "brainstorming session" and is usually a unanimous one. These sessions are held every Friday evening and have been in effect almost from the beginning. These consist basically of sales meetings and all outside Miller salesmen attend. Sometimes they have guest speakers that may outline a new line or product or it may consist of a policy discussion or product line decision.

"Some of the strangest and finest promotions eminate from these meetings," stated Dave Stegner. "A good example is one of our current ideas or gimmicks that is a lot of fun but still produces increased sales and good will with the dealers. Actually, we call it our silver dollar promotion and it is tied in with our year long silver anniversary celebration. The salesman is furnished with 13 playing cards and on each is printed a particular product line. The dealer is asked to pick a card and give it to the salesman. Then, as the salesman takes the order, if the dealer should name the product line in his order the salesman gives him a silver dollar. The dealers actually become more brand name conscious and a lot of fun is had by all."

Speaking of the silver anniversary celebration, Miller's is having a year long promotion that features a special buy of the month. Each month a mailer goes out on what is to be featured and the dealers certainly look forward to receiving this mail.

The Miller sales staff are not the only ones that have meetings. Every Monday morning all the counter men have a meeting at which time they go over any problems, new lines or products, etc. in order to be well acquainted with just what is going on from the sales promotion stand-point. To make sure everyone is included a tape is made of the meeting and is sent to the Santa Rosa store.

"It is a strange thing," stated Mrs. Miller, "the salesmen are not required to attend these Monday morning sessions but most of them seem to make arrangements to be here at that time."

#### 36 EMPLOYEES

As stated earlier, the Miller family of employees has reached 36 of which 8 are outside sales personnel. The sales staff, led by Woody Stillman includes Howie Waterman, who works out of the Santa Rosa store, John Cambra out of Walnut Creek and Bud Loven, Bill Murphy, Charles Raabe. Bob Cochran and Jack Davis out of Oakland, The inside sales force consists of Fred Banfield, head counterman, Tom (Tab) Bolmen, Dave Hutcheson, Tom Bletsoe, O. R. Dole and Verne (Joe) Johansen. The Finished Product Division Manager is Norman Miller and working with Norm on audio sales is Don McKinney and Tom Bruce.

The Audio Visual and Finished Product Division is rather unique for a Parts Distributor. According to Norm Miller, "our audio-visual division happened almost by accident when we learned that the schools were going more and more into "language labs." What we have done is to build some special equipment that includes our Voice of Music tape recorders, a special microphone and stall type "labs". The installation of this system has produced outstanding results (Continued on Next Page)



A New Channel Master TV is the object of this conversation between (left to right) Lee Naylor, Western District Sales Manager of Channel Master; Mr. Dave Stegner, Miller Buyer, and Mr. Bob Cortes, Western Regional Sales Manager for Channel Master.



Well liked Woody Stillman, Parts Sales Manager for Millers, is shown here going over some of the window display materials they have made available to the dealers to use as a tie-in with the Miller & Associated Distributor's Television program.



Mr. Norman Miller, Louise's Son, is shown here going over some last minute details of a busy day. Norman is Finished Products Sales Manager and is responsible for the new audio division of Millers that is specializing in Schools.



Howard Waterman (left), Santa Rosa Salesman, goes over some last minute sales information with Santa Rosa Branch Manager Bill Kinney.



Mr. Irv Kretzer, office manager in Oakland, is pictured here going over some of the detail work during a busy day.



Fred Banfield, who is in charge of the countermen, makes sure tha; everything is done to make the customers happy.



Credit Manager R. K. Davisson is know as the friendly credit man by most of the Miller staff.



The Walnut Creek store is in the capable hands of Dick Rauscher.



Une o. the most important events in the history of Miller's was in 1954 when the present store in Oakland was opened. Joining in the celebration were (left to right) Mr. Jack Morae, then credit manager and now Louise Miller's husband; Mr. Dave Stegner, Louise Miller and Woody Stillman.

and our divison has now evolved into closed circuit TV systems, viewing screens, etc. The real beauty of this program is that it has increased our V-M sales through dealers since the children using this system in school demand similar equipment in their home."

The V-M line naturally includes stereos, phonographs, etc. and in order to do a job on this type of merchandise Miller's have gone into a policy of "programs" instead of promotions. In explaining this Norm Miller pointed out their latest "program" is the stocking and displaying of the entire V-M line. Under this program a dealer agrees to stock one of each item in the line and to display these products on their floors. From the sales activity a turn-over rate is determined and a rebate system devised to meet the individual dealer situation. "In this way," stated Norm, "we don't over-load a dealer with merchandise in order to fulfill a so-called promotion. Usually a promotion lasts an average of two or three months but with our "program" it is a year long sales push that has proved to be beneficial to everyone concerned."

Another Miller type "program" is the Miller Stamp Plan. Under this idea dealers earn stamps from their tube purchases with a graduating scale that increases with the size of the order. These stamps can then be redeemed for merchandise, trips, premiums, test equipment or whatever the dealer might wish to have.

"One of the most successful Antenna sales producers we have ever had is our Channel 2 TV spots in cooperation with Associated Distribution Co. in San Francisco stated sales manager," Woody Stillman, "We first tried this type of program about a year ago and it was received with such enthusiasm by the dealers that we have gone ahead with it again this year. Basically, it consists of Channel Master spots on Channel 2 in class A time slots that began with two weeks of 12 spots a week . . , went into high gear with 24 spots a week for the next six weeks and finished off with two more weeks of 12. This promoted the Channel Master Golden Crossfire Antennas and was a complete package of window stremmers and additional materials from the station. Dealers also used their co-op funds to tie-in with local newspaper ads."

This is Miller's of yesterday and today. What about tomorrow and the years to come?

Optimism blended with realism could sum up the position of Louise Miller concerning such a question. Louise agrees that finished products are getting better and the demand for repairs are on a decline. She also agrees that the so-called "captive service" may very well increase before it decreases. That the service dealer as we know him today may either evolve into a real electronic service dealer that will be servicing electronic ovens, intercoms, and garage doors as well as TV or he may evolve to a basic "one-man" shop operation that will keep over-head down and continue to make a good living as an independent service dealer.

On the desk of most Miller executives and very prominent in their stores is a reprint of an ad that was recently found in Newsweek Magazine. The headline on this ad is "Yesterday the last wholesaler went out of business" The ad reads, in part, "Yes, the middleman was dead—the long battle was finally over. Starting today you buy everything direct. No more do you pay the wholesaler his percentage. But did you really gain? You lost the ability to order 1/6 or 1/12 of a dozen. You lost once-a-week, twice-a-week. three-times-a-week deliveries, You lost a friendly creditor one who would wait and wait when business was slow. You lost a bookkeeper—one that kept your account from getting snarled. You lost a warehouse that was at your beck and call and You lost a friend."

The ad is not as ominous as it would seem because it finished up with the following: "(Aren't you glad that everything written here is fantasy—and that you, the retailer, can keep it that way. Buy direct from your whole-saler—the business you save may be your own!)



This is a picture of the first Board of Directors of NEDA that Louise served on in the early 1940's We can't name them but am sure others in the Industry will recognize familiar faces.

"We have always had faith in the service dealer and certainly feel his future is secure. Times, people and products will change but the basic concept of the American way of life will always be the same. The need and desire for individual small businesses plus the ever present feeling to be in business for yourself is here to stay and Miller's will always continue to do their best to serve the independent service dealer."

This statement, made by Louise Miller, pretty well sums up our Distributor of the month. She is celebrating her 25th year as an independent business woman who began with very little more than desire and today is one of the most respected electronic distributors in the country.

### Congratulations

### MILLERS TV AND RADIO SUPPLY CO.

on your 25th Anniversary

ONE OF THE VERY FINEST ELECTRONIC DISTRIBUTORS IN ALL AMERICA

# MILLERS IS ANOTHER NAME FOR MERCHANDISING IT INCLUDES—STOCKING IN DEPTH

- ---PROMOTING
- —SERVICING
- -AND SHOWING DEALERS HOW TO MAKE MORE PROFIT

Jensen®

WITH THE WORLD'S FINEST PHONOGRAPH NEEDLES, CARTRIDGES, AND DRIVES

# Congratulations

to

## Louise Miller

and her

Outstanding Organization

# SONOTONE CORPORATION

Elmsford, N. Y.

**QUALITY AUDIO PRODUCTS** 

# WHY A CTC-4 CHECK CHART?

technical section

An MESD special feature

Irv Tjomsland, Editor

The CTC-4 Check Chart is the result of the "PROBLEM OF THE MONTH" as suggested by Lee R. Neal of Burbank. He asked if a list of modifications for the CTC-4 chassis was available.

The co-operating shop on this problem was Tri-Color TV of Burbank owned by Ralph Johonnot of Burbank, and thereby hangs another story.

Jimmy Songer, Tri-Color's anchor man in Color problems turned out to be a walking storehouse of change and engineering information. Jimmy's intense interest in the subject is constantly stimulated by new and different problems which arise whenever a new chassis is released to the market. Several of the service suggestions, X-7 for instance, came as a result of Jimmy's personal research.

On the Tri-Color staff, also, are two individuals who have been fully involved in the Color Service story from the days of the "Iron Monster" in 1953, Morrie Meyer and George Durakoff.

Morrie can compare his Color experience favorably with anyone in the business. His contribution to the Check Chart was extensive and he made many suggestions which were incorporated into the text.

George was able to offer a great deal of data concerning some of the modifications which will be discussed in the succeeding articles. One modification done to one receiver does not furnish enough background for a general recommendation, but a good sense of balance will be gained when the modification is applied to dozens of receivers and contact maintained with the customer to observe results. In this George was invaluable.

Through out the many sessions Jack Boynton, the latest staff addition did much to keep the work going forward.

Our sincere thanks to all of them. WHY A CTC-4 CHECK CHART?

To the casual reader the coverage of the early Color Television receiver may appear to represent effort that could have been applied more profitably to other activities. However, a little thought will quickly develop the possibility that this series may find good acceptance among all segments of the service industry.

THE PROFESSIONAL SERVICE-MAN understands all to well the value of modification or correction data if the material concerns information he would have to "sweat" for hours to obtain. Such data can switch a loss job to the profit column and be a great help in customer relations. But that is not all:

THE NEW MAN, just entering the field, will surely collide head-on with Color Service problems. He not only has to absorb the "know-how" that others have accumulated over the years, but must take the second step before the first is completed.

How can he do this? The CTC-4 is a possible answer.

The New Man will tend to be in a somewhat lower income bracket, but if he can find a "Trade-In" CTC-4 within his means, he will find that he can go all the way from "fuse change" to final alignment and adjustment if he will follow the "Check Chart".

He will gain in two ways: The pro-

cedures he learns and the skills he develops will be salable to customers because thousands of these receivers are in daily use, and second he will, while learning, add substantial value to the receiver he is using for familiarization.

AND LAST, THE CUSTOMER WILL GAIN. The customer will gain because he will be able to obtain more performance for his service dollar. And why else did he invest in his receiver?

The material accumulated is too lengthy for publication in a single issue and has been divided into installments. This may tend to make the application of the Check Chart more difficult than if it were to be contained in a single, coherent brochure. It is the hope of the publisher that the material contained in the separate issues can be combined into a convenient manual for service shop use. Comments from servicemen on this subject are invited.

The first section of the CTC-4 CHECK CHART has been presented in this issue. Due to space limitations additional sections covering MODIFICATION, BEAT PROBLEMS AND ALIGNMENT, and CONVERSION FOR SULPHIDE TUBES will be published in the June and July issues.



Pictured here are the fellows that helped put together the first Color Check Chart. Left to right, Morrie Meyer, Jack Boynton and Jim Songer all of Tri-Color TV in Burbank, California.



# CUES

#### PART I

#### • • • A CTC-4 COLOR CHECK CHART TO PROFESSIONAL SERVICING

SOURCE AND REFERENCE MATERIAL:

Servicemen who repair, modify, or align this series of receivers will find that versions of the CTC4 chassis found in many brands are covered by: RCA Service Manual 21-CT-661U, etc., dated 5-4-55 (original printing).

Early modifications and parts symbols are to be found in RCA Service Manual 21-CT-661U, etc., dated 12-9-55. Revised printing. Users of Howard W. Sam's Photofact Folders are referred to Photofact Set 314 Folder 9.

Schematic identification symbols are shown for both publications.

#### X-1: GHOST IN PICTURE, NOT AFFECTED BY ANTENNA OR ALIGNMENT

A change in picture quality, which many customers compare to a ghost in the picture results when the terminating resistance at the output of the Delay Line changes.

The contrast control is used to terminate the Delay Line as well as control gain, and in many instances has been found to increase in resistance to as much as 8 to 10,000 chims from the normal 2,000.

Picture degradation, particularly on black and white reception, may be noticed when resistance increases beyond 2,500 ohms, and ghost complaints arise when resistance passes 3,500 ohms.

| CAUSE OF FAILURE                           | RCA SYMBOL | PF SYMBOL | CORRECTION SUGGESTED                               |
|--|------------|-----------|--|
| Increase in resistance of contrast control | R-134      | R-4       | Replace with new RCA part no. 100381 or equivalent |

#### X-2: NORMAL RASTER SWITCHES TO GREEN (OR BLUE)

A sudden switch from a normal raster to green is caused by failure of the 3.58 Mc. CW oscillator circuit. If retracking is attempted alle the raster is green the raster will switch to bright blue if the 3.58 oscillator starts operating. The problem is frequently inter-

| CAUSE OF FAILURE   | RCA SYMBOL      | PF SYMBOL    | CORRECTION SUGGESTED  |
|--|-----------------|--------------|---|
| Crystal inoperative<br>Change in value of 47 K 1 watt oscillator screen<br>dropping resistor | CR-102<br>R-249 | M-9<br>R-186 | Sub with new Xtal 10049<br>Sub with 47 K 2 watt pin 2 of 6AZ8, 3.58 osc.  |
| Insufficient feedback from 3.58 oscillator cathode to grid                                   | C-209           | C-152        | Sub original 4 mmf, connected from Osc. Catch pin<br>3 to Grld pin 6 using 6.8 mmf                                      |
| Oscillator cathode coil erratic due to high inductance                                       | L-142           | L-85         | Change original chassis mounted adjustable oscillator coil to new Peaking Coil type 102315 (cathode of 6AZ8 osc. pln 3) |
| Parasitic oscillation in reactance plate tank coil   | L-127<br>C-229  | L-84         | Remove C-229, 2 mmf shunting L-127 plate tank, 6AZ8 reactance tube pin 6  |
| Feedback from B-Y amp to 3.58 osc. circuit   | L-143           | L-95         | Dress L-143, plate peaking coil 6AZ8 B-Y amp pin 8, away from 3.58 oscillator components                                |
| R-Y feedback to 3.58 osc. circuit due to wrong value peaking coil                            | L-129           | L-89         | Sub 1.7 mh peaking coil to 12BH7 pln 1 (thru 12 uh choke) with new coil same part no. 100448                            |
| G-Y feedback to 3.58 osc. circuit due to wrong value<br>peaking coil                         | L-130           | L-91         | Sub 750 uh peaking coil to 12BH7 pin 6 (thru 12 uh choke) with new coil same part no. 100597                            |

#### X-3: DRIFT IN WHITE BALANCE DURING RECEIVER WARM UP

Change in WHITE balance during warm up may be caused by defective tubes, such as the 12BH7 demodulator, 6AZ8 B-Y amplifier,

or both.

A more common source of this difficulty results when the plate load resistors in these circuits change value.

It is important to determine which of the three gun circuits undergoes the change in order to positively pin point the trouble. The manufacturer suggests that a voltmeter be connected between each CRI grid and cathode before the receiver is turned on. If blas voltage is noted one minute after turn on, and compared with readings fifteen to thirty minutes later the source of the trouble will be indicated by the greatest change in voltage. Effort should be concentrated on this circuit and tubes concerned should be substituted.

| SOURCE OF FAILURE  | RCA SYMBOL     | PF SYMBOL      | CORRECTION SUGGESTED   |
|--|----------------|----------------|--|
| R-Y plate load resistors 2 56K 2 watt in parrallel changing value      | R-252<br>R-293 | R-193<br>R-194 | Replace with 3 82 K 2 watt resistors in parallel spaced slightly apart connected to 12BH7 pin 1 thru 12 uh cheke           |
| G-Y plate load resistors, 2 56 K 2 watt in parallel,<br>changing value | R-259<br>R-281 | R-201<br>R-202 | Replace as above, but position to prevent heat from affecting R-Y loads. Resistors connect to 12BH7 pin 6 thru 12 uh choke |
| B-Y plate load resistor changing value                                 | R-294          | R-207          | May be replaced by using 27 K and 33 K, 2 watt in parallel. Connect to 6AZ8 B-Y amp, pin 8                                 |

The CTC-4 Check Chart is divided into sections covering Service Problems related to the CTC-4 Modifications, Alignment and Adjustment Suggestions.

Many service problems which will be encountered with this chassis are not included in the Section X-1 to X-10 because these problems are also typical of all receivers which use the circuitary. An instance of this would be the effect on audio 1F, picture 1F, and Sync circuits when filtering or bias changed in the 6405 audio output stage and caused secondary malfunctions in the circuits drawing power from the 130.140 volt source established by the cathode of the audio output stage. While serious, such problems will be very familiar to the serviceman who has encountered them in many brands of receivers over the years.

#### X-4: REPLACEMENT OF B+ RECTIFIERS

Servicemen ask if it is practical to replace the original Selenium rectifiers with the less bulky and expensive Silicon types. The answer is: Yes, if—

Servicemen ask if it is practical to replace the original Selenium rectifiers with the less bulky and expensive Silicon types. The answer is: Yes, if—
GOOD MECHANICAL MOUNTING AND VENTILATION ARE PROVIDED
B+ IS MAINTAINED AT THE ORIGINAL VALUE
If no precautions are taken, and Silicon rectifiers are substituted for the original Selenium types B+ will increase from 20 to 30 volts at 117 VAC line voltage. If the receiver is operated at the higher B+ value flyback fallure, overheating of video, demodulator, audio, and vertical output tubes can be expected.

TO PREVENT DAMAGE WHEN SUBSTITUTING SILICON FOR SLENIUM RECTIFIERS:
Install a 20 watt resistor, from 3 to 5 obms as required to obtain normal B+, between the 4.5 A, fuse and the junction of the two rectifiers. The resistor should be kept away from other components because it will operate at fairly high temperature.

Prolacements for RCA SR-101 and SR-102 Selenium Types 100416:

Replacements for RCA SR-101 and SR-102 Selenium Types 100416:

RCA: Silicon 106379 F-4 or 40-H Sarkes Tarzian:

#### X-5: NO CONTROL OF FOCUS:

Failure of the original focus pot can be caused by a momentary arc over in the CRT. The manufacturer recommends the use of a 2 watt pot when replacing the original  $\frac{1}{2}$  watt unit. Changes to provide additional protection are listed.

| SOURCE OF FAILURE  | RCA SYMBOL | PF SYMBOL      | CORRECTION SUGGESTED  |
|--|------------|----------------|---|
| Fallure of pot due to spot burn at point of normal setting | R-153      | R-23           | Install 100396 heavy duty replacement. If not available Allen Bradley JU-2541 or Ohmite CU 2541 |
| Resistors between focus pot wiper and CRT                  | R-276      | R-151<br>R-150 | Change original (2) 470 K 2 watt resistors to 1 meg   |

\*To install the Allen Bradley or Ohmite pot it will be necessary to use a  $\frac{1}{4}$ " to  $\frac{1}{4}$ " shaft coupler. Cut the original focus pot  $\frac{1}{2}$ " from the slotted end, and cut 1" off the replacement control shaft. Couple the two shafts with the coupler. Solder short lengths of stlff wire to the new focus pot terminals to expedite connection thru the bakelite mounting panel.

#### X-6: HORIZONTAL CENTERING CONTROL INOPERATIVE

The horizontal centering control will fall If the 20 mfd. 25 volt electrolytic by-pass capacitor opens or loses capacitance. If a new control is Installed without replacing the capacitor it may be damaged or ruined.

| POINT OF FAILURE                                    | RCA SYMBOL       | PF SYMBOL      | CORRECTION SUGGESTED   |
|---|------------------|----------------|--|
| Horizontal centering control                        | R-154            | R-24           | Replace with 100 ohm horizontal centering control part no. 100395 or equivalent.   |
| By-pass capacitors for horizontal centering control | C-148A<br>C-148B | C-10A<br>C-10B | Replace with 2 separate section 20 mfd. 25 volt capacitors RCA part no. 79380 or equivalent. Connect as shown in RCA CTC-4 schematic dated 12/9/55 or Photofact 314 Folder 9 |

#### X-7: INABILITY TO CONVERGE VERTICAL LINE BELOW CENTER ON LATE MODEL CTC-4

Some late runs of CTC-4 chassls incorporate a change in the vertical convergence circuit and can be identified by the Iron core choke mounted in the convergence control area. If it is difficult to obtain satisfactory convergence on the lower portion of the raster, the following addition may be helpful: (See RCA Schematic 21:CT-660 U, etc., dated 12-9-55)

SOURCE OF PROBLEM Vertical convergence choke in control section RCA SYMBOL

PF SYMBOL (Not shown)

CORRECTION SUGGESTED

Shunt the choke with a diode such as Sa Tarzian F-2, 20-H or equivalent. Connect with terminal to control pot side of choke. Sarkes-

#### X-8: HORIZONTAL SHAPE CONTROL AFFECTS ONE PART OF RASTER ONLY

If any of the three horizontal SHAPE coils do not provide control over the full raster, the defect may be due to shorted turns in the coil.

| SOURCE OF PROBLEM                          | RCA SYMBOL              | PF SYMBOL            | CORRECTION SUGGESTED                               |
|--|-------------------------|----------------------|--|
| Horizonal SHAPE coils on convergence panel | L-121<br>L-122<br>L-123 | T-11<br>T-13<br>T-12 | Replace with new RCA part no. 100429 or equivalent |

#### X-9. SNOW OR INTERFERENCE IN PICTURE (NOT DUE TO RF TUBE)

Change in the resistance value of an AGC voltage divider resistor may result in an increase of bias to the RF unit, accompanied by a decrease of IF bias. Snow and other interference may result.

| SOURCE OF FAILURE                  | RCA SYMBOL | PF SYMBOL | CORRECTION SUGGESTED                            |
|------------------------------------|------------|-----------|---|
| Resistor from B+285 to AGC circuit | R-202      | R-81      | Replace with a 5% 1 or 2 watt 1 megohm resistor |
| AGC by-pass capacitor              | C-185      | C-73      | Replace with new .33 mfd capacitor              |

#### X-10: CORRECTION FOR EXCESSIVE SHADING AT TOP OF RASTER

If shading increases toward the top of the raster, changes in the vertical retrace blanking circuit may be made as follows:

| SOURCE OF PROBLEM                     | RCA SYMBOL | PF SYMBOL | CORRECTION SUGGESTED                                       |
|---------------------------------------|------------|-----------|--|
| Capacitor from vertical output to CRT | C-175      | C-67      | Change original value from .039 to .01 600 VDC (or higher) |





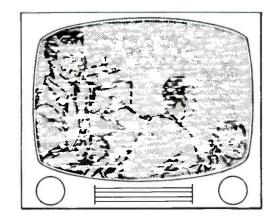
# ANTENNAS TO YOUR CUSTOMERS

By ROBERT D. RAYNOR, President Clear Beam Antenna Corp.

#### PART III

#### SNOW

Next to TV ghosts the most annoying problem is snow, those funny little white flecks which flit across the screen.



SNOW

Small white flecks which flicker across TV screen.

Although snow is usually a problem in fringe areas or in areas quite distant from the station they can been seen on any TV set simply by disconnecting the antenna. The reason for this is that every TV set produces snow . . . it is always there even when you cannot see it.

Getting rid of snow is like having to talk in a noisy room. If you cannot stop the noise you can yell louder so that the room noise is less than your voice, and you can be heard.

Putting a stronger (louder) signal into the TV set allows the TV set to work on the TV signal which is louder or stronger than the noise . . . or "snow which" is already there.

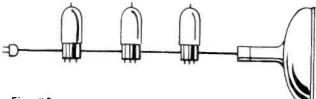


Fig. #3.

Snow is actually the picture of a "hum." It may be compared to the idling sound of an automobile or the hum of a radio which is turned on but which is silent.

What actually causes the noise are the receiving tubes in the TV set which work by having electrons flow from one part to another. When there is a signal present from the antenna, most of these electrons are used to carry the signal. When there is no signal, the tube can be compared to a car idling. It is turned on but that is all. There is no work being done. Even in the best cars, there is some idling noise. This is what produces snow on the screen. If the TV signal from the antenna is so weak that the set has to strain to amplify it, the set also amplifies those "idling" electrons right along with the signal. If the signal is strong and the set does not have to amplify it so much, it also does not amplify the "idling" electrons. In this case the snow is so light as not to be noticed or so weak it cannot be seen at all.

#### SUMMARY

Snow is always present on a TV screen. If the signal received is stronger than the snow, the snow cannot be seen.

#### INDUSTRY NOTES

# RADIO PRODUCT SALES NAMED NEW CHANNEL MASTER DISTRIBUTOR.

It has just been announced that Radio Product Sales, Inc. of Los Angeles has just been named as an additional So. California Distributor for the complete Channel Master line. According to Lee Naylor, Western District Sales Manager for Channel Master, "this appointment in no way effects our present distribution pattern with the Kiesub Corporation and will only provide additional distribution in certain areas."

The Kiesub Stores are located in seven key areas, including San Diego, and will continue to handle the complete line of radios, tubes, etc.

Mr. Doug Dumas, of Radio Product Sales, will be in charge of this division and will over-see the Channel Master sales program.

#### AD1292 Discussed At Consumer Council Meeting

AD 1292, Television Registration Bill, was recently discussed before representatives of over 300 individual organizations at the Roger Young Auditorium in Los Angeles. Our Bill was presented by Mrs. Ash, executive secretary to Senator Short of Stockton, the author of the Bill, and representing CSEA with her was Darrel Petzwal of the Sacramento Chapter. The program was under the direction of Mrs. Helen Nelson and her Consumer Council and is part of a project to inform interested groups in bills now before the legislature.

# Sylvania Wins President's "E" For Excellence

Secretary of Commerce, Luther H. Hodges, left, presents citation accompanying President Kennedy's "E" Award for excellence-in-export to James J. Clerkin, Jr., center, president of General Telephone & Electronics International Icnorporated, and Karel van Gessel, vice president and managing director of GT&E's Sylvania International Division. Award was made at the opening session of the National Foreign Trade Council annual convention at the Waldorf Astoria. The Sylvania International Division of GT&E was cited for imaginative research in the development of both electronic products and overseas markets and aggressive sales campaigns, which enabled the division "to double its export sales in the past two years and increase them 20-fold in the past 15 years."

# PICTURE TUBE SAVINGS!





AND

# **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

#### "Businessman & the Law" Newsletter

"The Businessman & The Law" a new monthly newsletter designed to keep the small and medium-sized businessman abreast of legal cases which affect his day-to-day decisions. Employing the "case history" style of reporting, "The Businessman and The Law" provides a cross-section of court cases and agency rulings which affect a wide range of business practices. Some of the areas covered in the newsletter include:

Personal liabilities of corporate officers-trade secret protection-liabilities of manufacturer, distributor, retailerproduct claims and sales promotionsdesign-copyright-and-protection - right or wrong selling practices-problems of employment contracts-legal aspects of executive compensation—seller-customer relation-credit & banking pitfalls-conflicts of interest rulings liability in emplovee relations-trade mark infringements-anti-trust violations-business legal instruments (notes, letters of credit, contracts) - fair trade & Price maintenance-plant property (thefts, sabotage, damage) -workmen's compensation-FTC and food & drug rulings employee obligations to company—pension & oldage rights-unemployment insurance claims-advertising practices-company-salesman relationship merchandise-marketing procedures-legal rights of small businessmen-personal tax liability-legal use of corporate fundspurchasing practices—proxy contests.

Written in non-technical language, "The Businessman & The Law" deals with such questions as:

Can an employee sue his boss for free advice that turned out wrong?

Can a businessman take a tax-deduction on an under-the-table kickback?

Can you stop one of your ex-salesmen from soliciting your customers?

Can a person who did not buy your product sue you for defective merchandise?

If you attend a management meeting at a resort, can the tax-collector call it a bonus?

If you run a sale, can you advertise your merchandise as "below regular prices"?

If an employee steals checks from your company, does the bank have to make good?

Can your competitors force the government to reject your bid?

Can you refuse to do business with a customer who sues you?

For a free sample copy write to: Man & Manager, Inc., 799 Broadway, New York 3, N.Y.

# STOLEN MERCHANDISE REPORT LIST

| Stolen from   | Date         | Make  | Model                         | Serial No. |  |
|---|--------------|---|-------------------------------|------------|--|
| Ludlow TV Sales   | 1/21/63      | P.B.  | 19T9A                         | 155204     |  |
| 9335 Long Beach B   | vd. 4/11/63  | P.B.  | 19T10A                        | 177773     |  |
| Long Beach, Calif.  |              | P.B.  | 19T17A                        | 200092     |  |
| Powers TV   | 12/8/62      | GE  | M502XBN                       | 981336     |  |
| 3619 Cutting  |              | GE  | R608XVY                       | 634356     |  |
| Richmond, Calif.  |              | GE  | M206XON                       | 549527     |  |
|   |              | Du Mont B   | on Voyage                     | 296033     |  |
| Leon Block Radio Service 1/2/63<br>3801 W. Jefferson<br>Los Angeles |              | Guide Eye Checker AE 536<br>Eico 6-12V Pwr. Supply<br>Heath Signal Tracer<br>N.V. Pic. Tube Checker |                               |            |  |
|   |              | Delco Rad   |                               | 983945     |  |
|   |              |   | otorola Car l<br>ssorted Tube |            |  |
| Hoyt's Corner Supe<br>9700 Main St.<br>Lament, Calif.               | rette 2/9/63 | Motorola  | 421T18M                       | D140294    |  |
| Page TV Service   |              | Zenith  | K1620K2                       | 7393408    |  |
| 5534 Monte Vista  | Street       | Zenith  | H2214G                        | 3661922    |  |
| Los Angeles 42  |              | Zenith  | H2105L                        | 3780301    |  |
|   |              | Zenith  | H3308Y                        | 3628718    |  |
| Victor Hardware &   | Appliances   | Zenith  | K1620Y2                       | 7549511    |  |
| P.O. Box 97   |              | Admiral   | P908                          | 10043435   |  |
| Victor, Calif.  |              | RCA   | 3RC51                         | 008382     |  |
|   |              | Zenith  | K725L                         | 22141806   |  |
| Lucky TV  | 2/15/63      | Sylvania  | 19P18                         | 362-4010   |  |
| 669 N. Glendora<br>La Puente  |              | Motorola  | 19P15BE                       | 592293     |  |
| United T.V. Service   | 4/16/63      | Zenith  | 2012G-2                       | 7666312    |  |
| 6494 Broadway<br>Sacramento   | -//          | Zenith  | 2014F-2                       | 7614914    |  |

# TEAR OUT AND SAVE FOR FUTURE REFERENCE!

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# Home Entertainment "Pay TV" Introduced in Santa Monica

A major breakthrough in pay television, including plans for installation of America's first "cable electronic theatre," was revealed recently by Home Entertainment Co., Inc. of Los Angeles, in its Santa Monica headquarters to a top level gathering of more than 500 executives, stars and press, representing all branches of the entertainment and business world.

Two other major announcements implementing this program were made by Oliver A. Unger, President of the parent company, and Chairman of the Board of the local franchise.

First, he stated that General Telephone Comuany will start laying the coaxial cables for the initial installation for 20,000 customers in the Santa Monica area in the early part of the next year.

Secondly, he announced that Wendell Corey would be the President of Home Entertainment Co., Inc., of Los Angeles. Mr. Corey, noted film and TV star, is also President of the Academy of Motion Picture Arts and Sciences; on the Board of Directors of the Screen Actors Guild; on the Board of Governors as well as National Trustee of the Television Academy of Arts and Sciences. Mr. Corey is a resident of Santa Monica.

Announcement was also made of the appointment of Jerry Gabriel as Vice President, Operations, of the Los Angeles franchise, and of Jack Orbison, former CBS director, who will be program director.

The demonstration was conducted by H. W. Sargent, Jr., Vice President of Home Entertainment Co. of America who as the inventor, has devoted the past ten years creating the company's pay television system.

Mr. Sargent also introduced the executives and engineers of five major collaborating companies engaged in developing and installing the various systems in Home Entertainment's first electronic theatre. They represented General Electric, developers of the home meters and program selector units; Radio Corporation of America, who are installing the studio equipment; General Telephone Co., who will build, operate and maintain the cable system; American Electronic Laboratories, who built the special equipment to transmit signals to customer's homes, and who will act as Home Entertainment's engineering consultant; and the Glenn-Armistead Company, who will provide the remote production facilities.

Important stress was made of the fact that the Santa Monica installations will not be a test, but will mark the first historic start of a full-fledged pay television operation in this country. The demonstration revealed that Home Entertainment will not confine itself to one channel, but will have a flexible three-channel system. Two of these channels will be for pay programs, and the third will be an information channel on which continuous previews will be shown of forthcoming programs. Facilities also

will be provided for bringing into the home continuous performances of popular and classical high-fidelity music.

A number of advantages for subscribers were demonstrated. These include easy home installation; the simple connection to the antenna terminals, and the fact that the meter is placed outside the house and can be read without bothering the customer who will have the advantage of a credit system without the nuisance of coin collections. The customer will be billed at the end of each month for only those programs seen. There will be a nominal service charge of \$1.00 per month.

Programming will not be tied to any one entertainment field. The sample schedule prepared for the demonstration last night included previews of new movies, sports events, musical programs ranging from classical to jazz by remote broadcasting direct from their concert halls or night clubs, fashion shows, stock market reports, art and educational programs for both adults and young, and foreign language courses.

The multiple-pricing system was explained whereby fees per program would range from a nominal 15¢ or 25¢ or \$1.00 to \$1.50 for a new movie, and for a special event such as a championship fight would amount to the price of a single theater admission.

No extra charge will be made for repeated viewing of any program. For instance, if a new movie is viewed by some members of a family, those who missed it may see its repeat on the same set at any other time without the meter recording an extra charge.

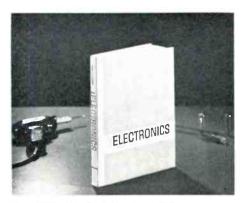
The choice of Santa Monica for the first installations of the Home Entertainment system, according to Mr. Unger, was based on careful consideration of potential outlets. A recent study, he said, showed that Santa Monica was one of the most typical cities of its size in the United States.

Santa Monica offers two important advantages to a pay television system. One of these is its close proximity to Los Angeles, a national source of entertainment. The other is the audience potential of an estimated 2,500,000 television sets in Los Angeles County which eventually can be reached once the Santa Monica operation is extended. This is considered a high concentration of television viewers when compared with the national total of an estimated 56 million sets—a number which reveals that there are more television sets in American homes than telephones.

Current installation schedules, according to the company's blueprint, point to a start of actual programming within 14 months.



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



#### DELMAR PUBLISHERS . . .

of Albany, New York, have announced the publication of "BASIC ELECTRONICS", by Lawrence A. Johannsen & Russell P. Journigan (298 pages, cloth-bound). The new book features unit organization of material, review questions, and key point summaries for each chapter, with Keyed laboratory experiments. All instruction is based on the modern electron theory.

The units of instruction are arranged in workable sequence designed for simplicity of use, with a balance between theory of electronics and the laboratory

applications of the theory.

The units of instruction are arranged in workable sequence designed for simplicity of use, with a balance between theory of electronics and the laboratory

applications of the theory.

Contents include: Vacuum Electron Tubes, DC Power Supplies, Basic Amplifiers, Vacuum Tube Oscillators, Special Purpose Tubes, Gas and Vapor Electron Tubes, Magnetic Amplifiers, Transistors, Basic Transistor Amplifiers, Transistor Oscillators, Special Semiconductor Devices, and Electronic Testing Instruments.



## JFD ELECTRONICS CORPORATION . . .

Brooklyn, New York, has introduced a new indoor antenna that receives all channels from 2 to 83, as well as all FM and FM Stereo stations.

Featuring a new type 6-position switch and UHF radio-direction-type loop, the model TA995-M Astro-Jet improves performance and minimizes interference. It is constructed of lustrons mahognay colored butyrate to match most home interiors. Four section telescoping brass dipoles and weighted tipproof base are some of the other features of the new JFD antenna.

The JFD TA995-M is expected to satisfy the growing demand for a reliable indoor antenna that will receive all present VHF stations as well as all present and future UHF and FM stations. It will be packed in an attractive 3-color carry-home carton.



#### A SERIES OF TWO ENTIRELY NEW MULTI-SET COUPLERS .

for quality TV reception have been introduced by Blonder-Tongue Laboratories, Inc.

The new Color-4 model is designed for color reception, while Blonder-Tongue's Set-2 model serves as an all-channel coupler in two-set systems,

According to the manufacturer, the Color-4 provides excellent reception on up to four TV receivers from a single antenna. Excellent for black and white sets, the Color-4 is especially recommended for color reception where requirements are more exacting.

The VHF coupler reportedly provides maximum inter-set isolation (16 to 24 db), excellent impedance match, and only a 6.5 db insertion loss—yielding clear, interference-free reception to all sets on the system.

The Color-4 features the most up-todate circuits plus ferrite broadband transformers in balanced bridge design, it was noted. Its voltage standing wave ratio is less than 1.5, providing less insertion loss, ghosts and smear in reception. List price: \$9.95.

Blonder-Tongue's new all-channel Set-2 coupler is ideal for two-set TV systems. It is capable of delivering signal power to both VHF and UHF television receivers operating from the same antenna

Blonder-Tongue's new all-channel Set-2 coupler is ideal for two-set TV systems. It is capable of delivering signal power to both VHF and UHF television receivers operating from the same antenna.

The all-channel device offers resistive circuits providing 12 db inter-set isolation with 6 db loss. It lists at \$3.20.

All Blonder-Tongue couplers are easy to install—either indoors or outdoors. They are built with stripless connectors for quick installation as well as weatherproof casing for installation anywhere.

## A NEW MINIATURE TYPE HEAT SINK . . .

which dissipates heat very rapidly, and designed along lines used by NASA, is now being manufactured and sold by Macdonald & Company, Glendale 6, California.

There are two models—Straight Nose and Angular—which can be attached to the wires at any desired location, and especially in tight spots. The slim jaws are only 3/64" in width and can be inserted easily at points where heat sinks of larger design could not be used.

The Jaws of either the Straight Nose or Angular Type have Three Wire-Gripping Holes properly spaced in the Jaws to grip the unsheated or exposed wires without damage to them. Through correct spring tension they hold firmly wherever placed, and the positive grip is such that printed circuit boards may be tipped, tilted or turned over and they will not fall off . . . The actual heat dissipation area means far greater heat dissipation than their appearance would seem to indicate.

The "Little Joe" Straight Nose has an overall length of 11/4". The Angular model measures only 1 1/16" to the angular point and then has a 1/2" attachment length for deep insertion to the wire or wires. This Three-Hole Attachment design allows heat to be dissipated from three wires at one time. These Heat Sinks have no brittle joints to cause breakage and they are tough and long-lived.

(Continued on Next Page)

#### THE GALLO FMS-101 ANTENNA SYSTÉM . . .

said to be the world's smallest complete FM antenna system, offers improved FM and FM stereo reception in cities and suburban areas. It is equally sensitive in all directions and once it is positioned in the home, it does not have to be moved to receive a station. Available at department stores, appliance dealers, high fidelity dealers, or by mail from Gallo Electronics Corporation, 12 Potter Avenue, New Rochelle, N.Y. Price: \$29.95.

#### A NEW TYPE 8417 . . .

beam power pentode tube capable of power outputs up to 100 watts in pushpull circuits, is now available from the Westinghouse Electronic Tube Division.

The tube's design incorporates many of the latest advances in high-conductivity materials and techniques. It offers extremely good linearity which results in greatly reduced distortion. Along with good linearity, it features high-power sensitivity, thus requiring exceptionally low-drive voltage for maximum power output. This low-drive feature allows the circuit designer to use conservative operation of the preceding stages for even lower over-all distortion.

ONLY



the EICO model 902. Intermodulation/ Harmonic Distortion Meter & AC VTVM has been announced by EICO Electronic Instrument Co., Inc., 3300 Northern Blvd., Long Island City 1, N.Y. Price is \$250, for the wired unit.

The new EICO 902 is a complete audio tool combining IM and Harmonic Distortion Meter, sensitive AC VTVM and db meter in one compact instrument. Designed and constructed to rigid lab standards, it offers the extreme stability and accuracy for the most critical measurement requirements in audio research design and development. Yet its ease and speed of operation make it equally desirable for in-production test-

#### A NEW INSTRUMENT . . .

ing and qualtiy control, and servicing. The 902 is equipped with a 41/2" meter that provides full-scale pointer deflection for as little as .1% distortion or 10 millivolts AC rms voltage. Highly legible linear scale permits precise distortion readings to as low as .01%, and

±4% accuracy on AC voltage.

to as low as 1 millivolt AC. There are 6 full-scale IM ranges to 30% distortion, 7 for harmonic distortion to 100%, and 10 for AC voltage to 300 volts rms, with with ±5% accuracy on distortion and

# Tarzian offers FAST, DEPENDABLE TUNER REPA



It just makes sense that a manufacturer of tuners should be better-qualified, better-equipped to offer the most dependable tuner repair and overhaul service.

Sarkes Tarzian, Inc. pioneer in the tuner business, maintains two complete, well-equipped Factory Service Centers—assisted by Engineering personnel—and staffed by specialized technicians who handle ONLY tuner repairs on ALL makes and models.

Tarzian-made tuners received one day will be repaired and shipped out the next. Allow a little more time for service on other than Tarzian-made tuners.

Tarzian offers a 12-month guarantee against defective workmanship and parts failure due to normal usage. And, compare our cost of \$9,50 and \$15 for UV combinations. There is absolutely no additional, hidden charge, for ANY parts except tubes. You pay shipping costs. Replacements on tuners beyond practical repair are available at low cost.

Tarzian-made tuners are identified by this stamping. When inquiring about service on other tuners, always give TV make, chassis and Model number. All tuners repaired on approved, open accounts. Check with your local distributor for Sarkes Tarzian replacement tuners, replacement parts, or repair service.



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

# 24-HOUR SERVICE 1-YEAR WARRANT

(except tubes)

INCLUDING



#### THE INDUSTRIAL PRODUCTS . . .

Division of Jerrold Electronics Corporation announced recently it will market a versatile Video Sweep Generator (Model 1015) covering the 1 kc to 15 mc range for testing the frequency response of crystal filters and similar networks.

# CURRENT LITERATURE AVAILABLE



#### FROM COLORGRAMS . . .

A new color-coded circuit diagram system to speed TV troubleshooting, called TV Colorgrams, has been introduced by Colorgram, Inc., a subsidiary of TV Development Corp., Mineola, N.Y. The TV Colorgram Service Paks will initially cover the most popular TV chassis of RCA, G-E, Motorola, Admiral, Westinghouse, Philco, Emerson and Magnavox. Colorgrams will be sold through electronic parts distributors. The price of a complete Service Pak is \$1.95.

TV Colorgrams employ a color-coded circuit system to permit TV servicemen and hobbyists to quickly pinpoint TV receiver troubles. The Colorgram System is designed to simplify the use of the repair procedures most normally used by TV technicians. The new system consists of individual Colorgram Charts — each illustrating key circuits, signal flow paths in color; a color-keyed Master Schematic; and a Rapid Rapair Manual.

Individual Colorgram Charts focus on the following circuit sections: IF, video. audio, vertical and horizontal sync, B plus distribution and AGC circuitry. Each Colorgram includes voltages, waveforms, test points, and component values associated with the specific circuit, as well as a color-coded signal flow and continuity patterns. The entire ground conductor is shown in its own distinctive color throughout the Colorgram Charts. Even when a signal leaves the board and then returns, components and signal path are clearly indicated.

#### FROM G.E. . . .

A new, six-page directory lists all electronic component-products made by General Electric, and for each product, gives all direct sales locations by state

and city. Using the directory (GEZ-3454A), an electronic original equipment manufacturer can quicky find the nearest direct sales conact for every G-E electronic ocmponent-product. The listing does not include G-E agents and distributors. Directory is available from General Electric Company, Schenectady 5, N.Y.

#### FROM SYLVANIA . . .

A new booklet titled "Strap Frame Grid Subminiature Tube Manual." Sylvania is a subsidiary of General Telephone & Electronics Corporation.

The booklet details the characteristics of 10 new Sylvania strap frame grid receiving tubes, designed for industrial and military applications. The first section contains a brief description of each type, circuits for a number of basic building block applications and performance data. The second section is comprised of data sheets, which define each type in terms of mechanical and electrical ratings, average characteristics, basing connections and other pertinent details. Characteristic curvers also are provided to facilitate circuit design and evaluation.

The booklet may be obtained, without charge, by writing Sylvania Electric Products, Inc., 1100 Main Street, Buffalo 9, N.Y.



#### FROM BLONDER-TONGUE . . .

Closed circuit TV has emerged from the development stage and now ranks with computers, data processing machines and other forms of automation as a major contributor to industrial efficiency and dollar savings.

According to a booklet issued for management officials this week by Blonder-Tongue Labs, Inc., thousands of firms have installed CCTV for uses that range from production control and order handling to plant security. Equally important, new CCTV applications are being found every day.

The booklet, available free, offers actual illustrations of CCTV installations now operating in steel and chemical

plants, schools even churches. It is designed to stimulate management thinking on how closed circuit TV can save money or perform difficult jobs in a variety of industrial operations. A nontechnical description of CCTV, a list of basic equipment, and a glossary of terms are provided to acquaint management officials with this developing field.

According to Blonder-Tongue, CCTV can today operate virtually anywhere, overcoming the limitations imposed by distance, danger, inaccessibility, and the inability of personnel to be at several places at the same time. Recently, cameras have been equipped with weather-proof and explosion-proof housings and windshield wipers for use under conditions of heat, cold, dampness, dust, and explosion-prone areas, the booklet noted.

The booklet. Closed Circuit Guide for Business and Industry, is available without charge from Blonder-Tongue Laboratories, Inc., 9 Alling Street, Newark 2, N I

#### FROM SPRAGUE . . .

An up-to-date revised edition of Sprague's popular Electrolytic Capacitor Replacement Manual has just come off the press, it was announced by the Sprague Products Company. Expanded to show 35 set suppliers not found in the previous edition, Manual K-106 now covers 256 makes from Acme to Zephyr, including TV sets as well as home, auto, and portable radios manufactured from 1947 through July, 1962.

This 40-page manual lists original part numbers for each manufacturer, followed by ratings, recommended Sprague replacements, and list prices. Over 2450 different electrolytic capacitors are included to insure exact replacement.

Manual K-105 is available free from 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.

#### FROM G.E. . . .

Three new brochures describing General Electric's complete line of compact vidicon cameras for closed-circuit television applications have been published by the company's Technical Products Operation. The eight-page, two-color brochures cover the new T7-14 and TE-15 cameras, and the field-proven TE-9 camera. Included are performance features and specifications, model and accessory data, and basic guides for system building. Brochures are available from: Advertising, General Electric Co., Technical Products Operation, 212 W. Division St., Syracuse 3, N.Y.

#### **CURRENT LITERATURE**

(Continued)

#### FROM JENSEN . . .

A new Brochure MH covering their new stereo headphones and headphone accessory equipment, has been issued by Jensen Manufacturing Company. The 2-color brochure describes and illustrates Jensen's HS-1 Stereo Headphones; the new CC-1 Headphone Remote Control Center which features "Space-Perspective"; and the CFN-1 Cross-Feed Network which provides "Space-Perspective" without the remote control features.

Space-Perspective involves new circuitry which makes headphone listening sound like loudspeaker listening whereby the sound is "out-in-front" of the listener . . . an effect not previously possible in headphone listening. Space-Perspective is licensed exclusively to Jensen by CBS Laboratories Div., Columbia Broadcasting System, Inc.

Before joining International Rectifier, Don was employed by G. C. Electronics, Rockford, Illinois, where he held the position of sales manager for several of that company's Electronic Distributor Product lines. He has been in the Electronics field for over five years.

#### Tips for Better Business **PARTNERSHIPS**

The beginning of a partnership may be the disintegration of a friendship.

Before leaping into the partnership, talk to a few very important people; your banker, your insurance agent, your family and your lawyer. All of these individuals are directly involved when you are considering a partnership.

Both parties looking into the partner agreement must realize that people are human beings, and human beings are subject to mistakes and doubts.

The family should be extremely interested in the proposed partnership, because you are liable not only for your share of the debts, but for your partners also. Termination of the partnership does not satisfy liability. Personal and real property are subject to seizure to make up the debts.



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#### TUNER REPAIR AND REPLACEMENT SPECIALISTS

ALL TYPES UHF-VHF-Combo UHF-VHF ONE DAY SERVICE ON MOST TUNERS

90 Day Warranty

Tuners will have all worn, broken or defective parts including shafts, wafers, sockets, etc. replaced and aligned to factory specifications on crystal controlled equipment.

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|------|-----------|------|-----|-------|-----|---|------------|
| any  | VHF       |      |     |       |     |   | \$14.50    |
|      | bo UF     |      |     |       |     |   | \$15.00    |
| incl | udes true | com  | bos | only, | not | 2 | unit jobs. |
| Two  | unit      | type | 25  |       |     |   | \$22.50    |

Includes separate U & V sections bolted to common bracket with string drive, etc.—Includes all Motorola, GE, RCA types.

An additional charge at net will be made for any missing parts, tubes of gress multiplication. gross mutilation.

SAVE return Postage and C.O.D. Charge by enclosing remittance with tuner.—Shipped via U.P.S. where possible.

Always include all tubes, shields, broken parts, and identify Tuner by set make, model and chassis number. ALSO, state what is wrong with

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Including all parts except tubes.

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VHF Rebuilt ..... ..\$9.95 UHF Combo ..... \$17.50 Broken or mutilated MAJOR parts are extra at net price. Nost tuners shipped same day 4130 El Cajon Blvd. San Diego 5, Calif.—AT 4-2733 1140 N. Vermont Ave. Los Angeles-NO 2-1397

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WCRE UHF Specialist and have something to offer you so that you can convert any set you have in the shop (portables excluded) into an all channel set. We have, at the low cost of \$12.95 an All Channel Converter Kit for installation 1N THE SET. The kit comes complete with tuner, knobs, mounting bracket, wire, and complete instructions. It is easy to install and works as well as a one tube external converter. Ideal for used sets and extra dollars for you on repair jobs. UHF ASSOCIATES

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Fresno 1, California

WE'RE UHF Specialists and want to help you make mouse in this new field. For the Los Angeles area, we have available for immediate delivery most Standard Coil Strips for Channels 22 and 34. These strips are Air Checked and fully guaranteed. It is an inexpensive way of giving your customer these fine new stations. The price for each is a low \$4.95. Write for quantity prices.

UHF ASSOCIATES
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Fresno 1, California

#### HOW TO USE WANT AD PAGE

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BY PHONE: in Los Angeles and I 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

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 RE-KUNS: 2nd and of the second 15% each Same copy.

HEADLINES, ETC.: Large headlines, box borders and 2-col. ads available

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

# Unique new Telstar Instant <u>Home</u> Demonstrator by Channel Master sells boosters by the hundreds

...and you can get it free!

Turn "snow" into "dough"! Sell Channel Master's outstanding Telstar Boosters—hundreds of them—during routine service calls.

Channel Master's Telstar Instant Home Demonstrator gives startling, dramatic "split-second proof"...that Telstar Boosters step up TV and FM gain. It puts into your hands the kind of powerful selling tool—a "house-to-house," before-and-after comparison test—that you've never had but always needed.

Want to know how you can get an Instant Demonstrator free!...
For full facts...call your Channel Master Distributor now!

Now there are 2 TELSTARS—both with built-in lightning protection!

1 Improved, easy-to-install TELSTAR TV/FM Booster (Model 0023A) with 4 set coupler.

2. New Telstar FMX for FM/STEREO (Model 0025) with 2 set coupler.



ELLENVILLE. NEW YORK

Fast, easy, light, compact! Comes pre-wired with booster already mounted—ready for instant use in customer's home. No climbing up on masts—no time-consuming hookups.



WESTERN ELECTRONIC SUPPLY Fresno

ASSOCIATED RADIO DISTRIBUTORS
San Francisco, San Mateo,
Mountain View, Vallejo

NORCAL ELECTRONICS
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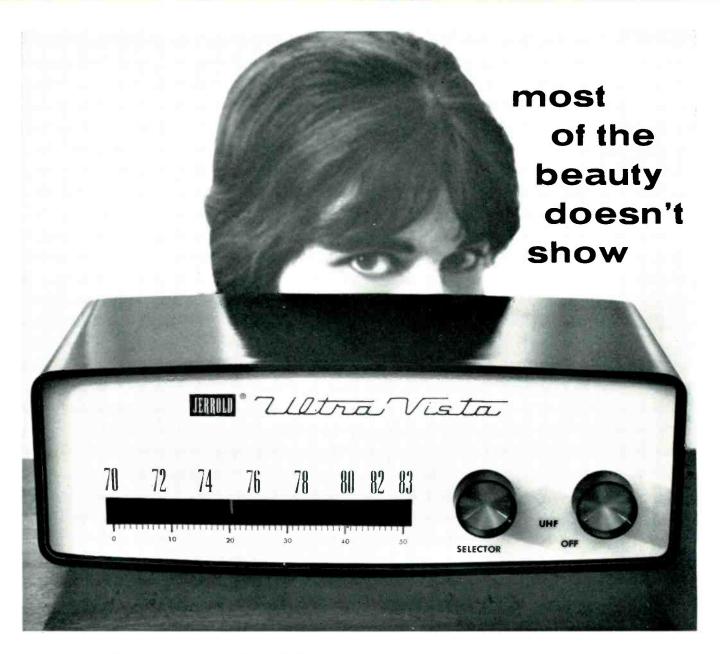
KIESUB CORP.
Long Beach, Oxnard, Van Nuys,
San Bernardino, Bakersfield,
Anaheim, San Oiego
ELECTRONICS DISTRIBUTING CO.

RADIO PRODUCT SALES, INC.

MIDLAND SPECIALTY CO. Tucson, Phoenix, Arizona







Beneath the attractive surface of the new JERROLD Ultra-Vista you find the only UHF converter with its own rf preamplification. For translator areas and other communities using the Channel 70-to-83 band, this means superior low-noise reception, thanks to the amplifying of antenna signals before they reach the mixer stage.

Look at the sleek bandspread tuning. When you twirl the selector knob, you experience a fineness of tuning offered nowhere else in UHF. A long-life nuvistor oscillator, a radar-

type mixer diode, and a transistor postamplifier operating at Channel 7 or 8 are additional features that set Ultra-Vista several cuts above the second-best converter. Minimum gain of 10db throughout the entire band.

Ultra-Vista is obviously destined for great popularity in difficult translator reception areas, for it removes snow from television screens as no other converter can do. Speak with your Jerrold distributor, or write for complete information.

List price \$49.95

# NEW ULTRA-VISTA... the only UHF converter with its own rf preamplification



Distributor Sales Division, Philadelphia 32, Pa.

A subsidiary of THE JERROLD CORPORATION

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

FIGARTS RADIO SUPPLY 6320 Commodore Sloat Dr., Los Angeles WE 6-6218 CAPITOL ELECTRONICS SUPPLY 17724 Van Owen, Reseda ST 6-5870

SOUTHLAND ELECTRONIC SUPPLY 3610 University St. San Diego, Calif. AT 3-3941 COOK ELECTRONICS 210 E. Hardy St., Inglewood OR 8-7644

WHOLESALE ELECTRONIC SUPPLY 265 So. Laurel, Ventura MI 8-3163 HURLEY ELECTRONICS 1429 So. Sycamore Ave., Santa Ana KI 3-9236

SOUTHLAND TV SUPPLY CO. 555 El Cajon Blvd., El Cajon HI 2-9638