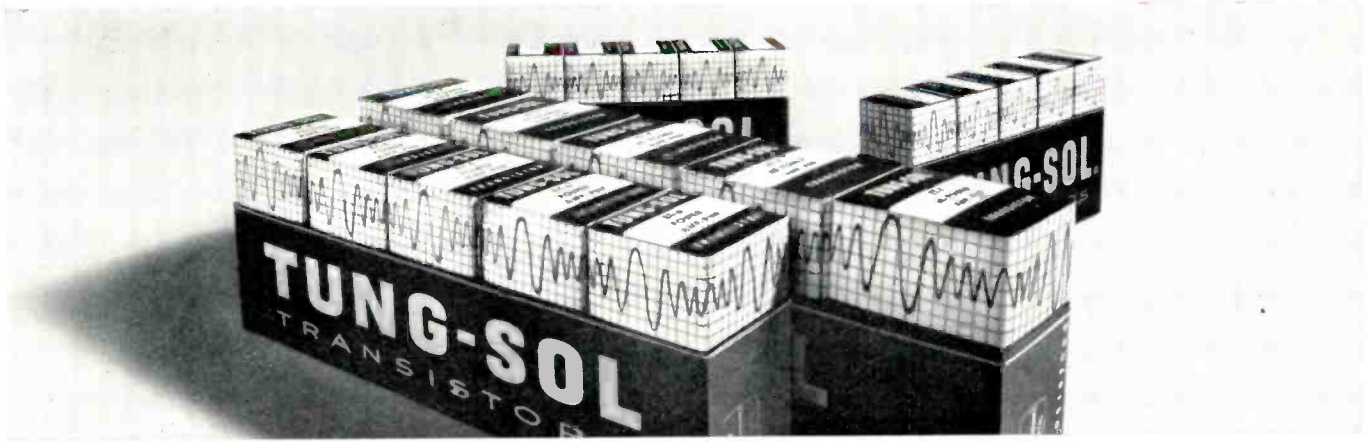
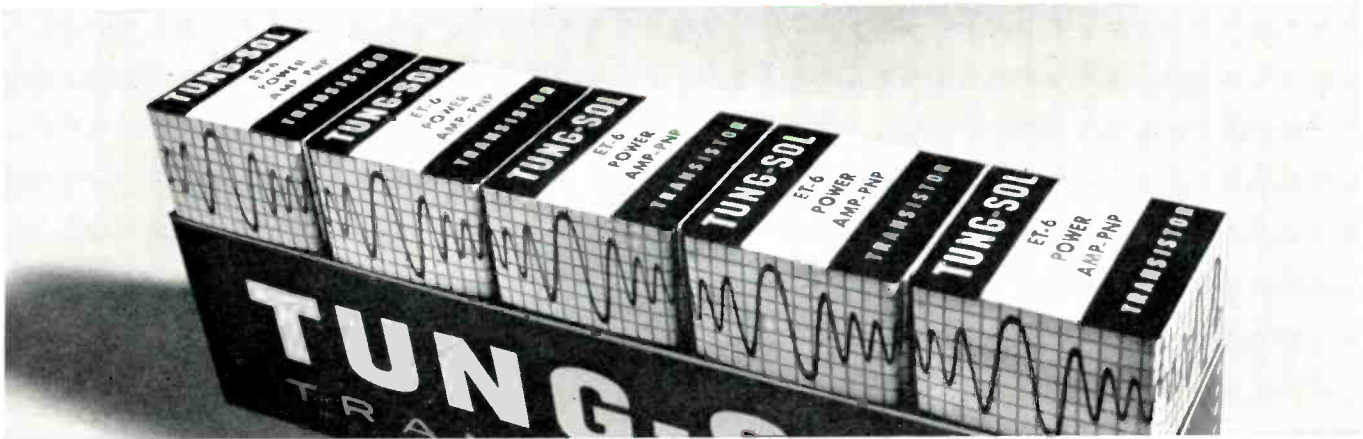


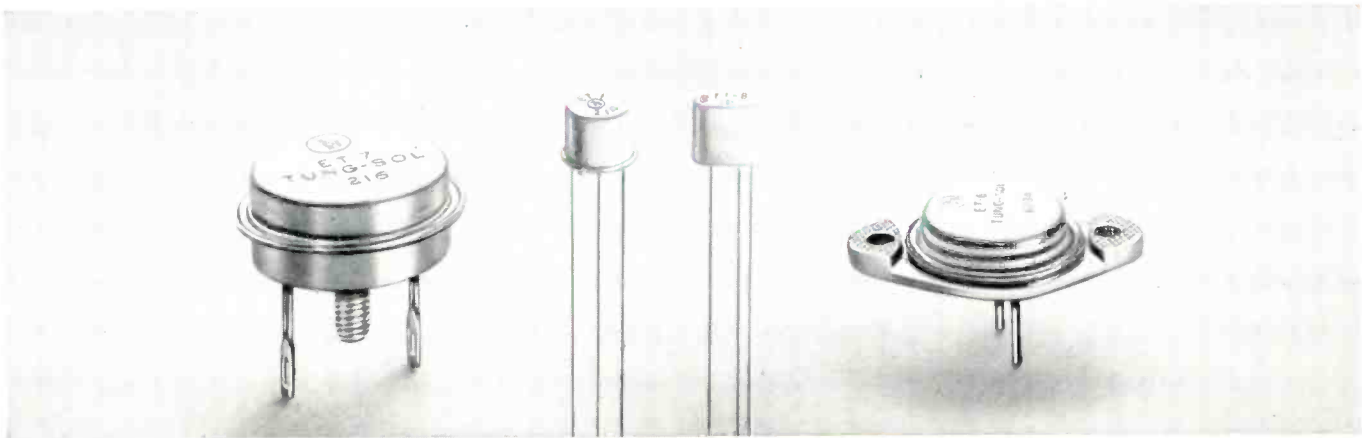
THREE REASONS WHY TUNG-SOL ET TRANSISTORS ARE YOUR BEST REPLACEMENT LINE



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2. EASY PRODUCT SELECTION



3. TUNG-SOL RELIABILITY

You can make almost all radio transistor replacements from these twelve Tung-Sol types. In addition to part number, packages are marked with type of service. All units are the equivalent of the original part and are products of American plants. The ET transistor line reflects the same quality standards that have made Tung-Sol the leading independent tube manufacturer. Tung-Sol Electric Inc., Newark 4, N. J.

TELL YOUR SUPPLIER YOU'D RATHER HAVE
CENTER LINE **TUNG-SOL**
QUALITY



MODERN

electronic service dealer

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COVER

Pictured on this month's cover is Miss Judy Tjomsland (now Mrs. E. M. Orme and living on the Island of Guam) looking over California's "Iron Monster." This was the first picture taken of the set that was responsible for many Californian's first look at color Television.

LETTERS TO THE EDITOR:

Dear Don:

Claire just turned your letter of the 3rd, re your not always receiving, or failing to receive, material from this end for MESD... that is, from ACTRA.

Frankly, I'm grateful for the information you sent. Some months ago I sent the change in address to our addressograph outfit. I naturally thought the change had gone through. The Zone stuff, of course, I address here in my office.

I have just phoned and given instructions to our mailer to fix the new plate, if he hasn't already.

As you know, I have mailed ACTRA stuff, as witness your printing the story on distributor cooperation in your September 22nd dinner-dance, so you have only been missing the meeting and minute mailings.

I have fine comments from many of our boys on your magazine... and I'd like to hand along compliments from myself. Am still, incidentally, working on the idea of a full page of editorial material, and hope shortly to get on with it.

Philip M. Fisher, Exec. Secty.
A C T R A Chapter, CSEA

Editor's Note: Thanks Phil... for your kind words in connection with MESD. I only sent the mis-addressed envelope along to point out that often times we did not receive this material and we wanted to carry the Zone and ACTRA news. You have always been most cooperative and I look forward to your "Northern California" news page within the near future.

THE 23RD PSALM (REVISED)

January 23, 1963

Dear Mr. Martin:

I enjoyed reading your 23rd Psalm (Revised) in the January 1963 issue of *Modern Electronic Service Dealer*. Others also might want to be in on this literary masterpiece.

Accordingly, we would appreciate receiving permission from your organization to use this "bit of nonsense"... and very close to the truth... in any applicable situations.

Thank you!

Cordially,
POMONA ELECT. CO., INC.
Carl Wm. Musarra

LEE DEFOREST FUND

January 24, 1963

Dear Don:

I read with great interest, one of the letters to your "Letters to the Editor" pieces in your January 1963 issue. My wife's father, John Colby Kitchin, was a classmate of Lee DeForest, and I must say classmate because I know it was one or two years on either side, back East, and was an admirer of Mr. DeForest. I personally would like to contribute to any fund that you people have set up, or will set up in the future, as mentioned in this letter in the January 1963 issue.

If I can be of any help, please contact me and I will do everything I can to facilitate the fund.

Very truly yours,
Frank R. Sestanovich
District Manager
Distributor Products Division

(Editor's Note): We certainly appreciate these comments and are looking forward to hearing from other interested people. Your

letter will be kept on file and if the program has enough interest we will let you know.

NOTE FROM AESC

January 23, 1963

Dear Mr. Martin:

Thank you for printing the article on "Price versus Quality" in the December issue of MESD. In this AFSC newsletter I would like to talk about specifications. You might title this "Specifications—Part 1," as in the next newsletter I will give you some impressions about what happens to specifications after a job starts.

At the present time the Association of Electronics Systems Contractors has a permanent committee on specifications. We are hoping to soon have the major manufacturers work together with our Association on specification writing.

SPECIFICATIONS—Part 1

Generally speaking specifications in MATV work are a mess. Some specifications are written by people who obviously know nothing about RF signal distribution. Some specifications are written by those who would favor one make of equipment over others, even though the other equipment would only differ slightly in details. Some specifications are rather loose... example: "TV antenna system with related equipment by others."

Some specifications say absolutely nothing but indicate television outlets on the drawings. On the other hand I have seen specifications so tightly written that you practically had to be a red-headed woman to make the installation.

It is our opinion that it is the responsibility of the specification writer to write specs that satisfy several requirements.

1. That the specs should be easily understandable by qualified bidders.
2. That responsibility (amount and by whom) for the system be spelled out.
3. That the results of the installation shall be tied down very specifically including minimum readings to be made after the installation is completed.
4. That specifications shall not favor one manufactured product over another that is really equal.
5. That the length of the warranty period be spelled out.
6. That the method of distribution should not be hindered (within boundaries).

Richard E. Linebarger

Dear Sir:

We have read with great interest your editorial article in your March issue entitled "Caution to Sound and Antenna System Dealers".

There is a possibility that in the future we may consider becoming an "Electronic Contractor". We would appreciate any help you can give us such as advising us as to the costs and qualifications necessary for becoming an "Electronic Contractor".

Thank you very much for your attention.

J & S Television Co.
B. R. Shuster

This editorial seems to have generated a great deal of interest and we have received several other requests in regards to a Electronic Contractor License. We will try to get more information and review it as soon as possible in MESD.

Dear Don:

As you can see from the letterhead, I've made my entry into the repping business. But, while I'm still cleaning up a few odds and ends at Sencore, I thought I would take this opportunity to thank you for the wonderful cooperation you gave me despite the sometimes adverse conditions. If there is any way

I can be of help to you in the future, please let me know.

Thanks again, Don, and perhaps if you are coming in for the show in May, I'll have the chance to see you then.

Edward Flaxman

Our best wishes Ed.

Dear Don:

The only way I can think of to thank so many people for their help at the PETSHOW is in a letter to the editor and since you spent three days in our jointly operated booth I wish to thank you also for all your time and efforts. A special thanks to Ron Kealey for making our State of California Chapter map with the blinking lights indicating each chapter and the work of Hugh Wilkins and the officers in Zone F, working well into the evening prior to the opening. Also a big thanks to all the members who spent time in manning the booth from Friday to Sunday. The three hour shifts were provided by Ron Kealey, Jim Williamson, Harry Kiyomura, Doug Bryan, Don Reed, Hugh Wilkins, Virgil Gaither, Ray Murphy, Norm Shannon, Jim Scarborough, Howard Singer and Mac Motonaga.

Ralph Johonnot,
Chairman PETSHOW

The fellows did a real fine job Ralph and you too are to be congratulated for making this one of the best organized participations we have had at PETS.

Dear Sir:

Please send me two subscriptions to your magazine *Modern Electronic Service Dealer*. We especially like your new Technician Section by Irv Tjomsland.

Thomas Baker

We are certainly pleased to learn that you are enjoying our new Technician section. Starting next month this will be devoted to color and will carry special articles on color on a monthly basis. If you ever have any suggestions as to what you would like to see in MESD please drop us a note.

Dear Don:

Bud and I appreciate the mention in this month's Magazine and hope that it will do some good towards solving his problem. Thanks.

George Perry,
Kiesulb Corp.

Happy to see you're reading MESD... let us know whenever we can be of help to any dealer.

Dear Sir:

Will you please add my name to your mailing list for *Modern Electronic Service Dealer* and please send me the Replacement tube code expiration dates for 1963.

Emery Francis,
Chula Vista, Calif.

Thanks for your note Emery and, by now, you have probably seen the 1963 tube replacement chart that ran in our March Issue. We have had many requests for this information and I feel sure it will be published on an annual basis... probably March of every year.

Don Martin:

1. Just a note to say Thanks for everything that you have done to date for PETS and for CSEA! You're doing a good job and I hope all your dedication pays off in the way you want. 2. Blood sweat and tears is the pay off which all of us must accept now... but I'm sure good work such as yours will bring greater regards thru continuous service.

Regards,
Cap Kierulff



DON MARTIN

STATE LICENSING BILL

We recently received a report from our Executive Secretary Kieth Kirstein in regards to the licensing bill and its progress. According to Kieth, "The licensing program is proceeding as well as can be expected at this time. In all such dealings there is a great deal of give and take, and we have been in daily contact with those most actively involved in our proposals. One bill, which has already been introduced, is not our bill, and while we do not consider it to be adequate or desirable in itself, we are attempting to merge its better features with our proposal. We are making good progress in convincing some of the more influential people here that our proposals are in the public interest and that our bill should be supported by these people, and we hope, by the administration. We are now concentrating on preparing a good "road bed" for our bill so that when the time comes it will have a clear track. This may not be the way of big and flashy publicity, but it is a necessary ingredient of success in what we have been striving for over the past years."

ADD ON ELECTRONIC CONTRACTORS LICENSING FOR SYSTEMS

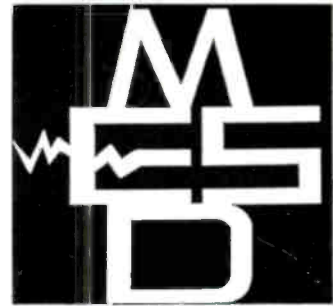
Since our recent article warning dealers about operating and installing antenna and sound systems without an electronic contractors license we have received numerous letters and calls requesting further information. Since that time we have learned that if you bid and win a job **THROUGH A GENERAL CONTRACTOR** you do not need a license since you are operating under his license. On the other hand, if you bid a job direct and the cost is over \$100 you can be cited for operating a business without a contractors license. This pertains **ONLY TO NEW CONSTRUCTION** and does not involve installations in existing structures. The procedure for obtaining an Electronic Contractors license is the same as any other building contractors and information can be obtained through your local State office.

YELLOW PAGE MISTAKES

There has been a lot of comment from all over the state in regards to the new yellow page directories that still contain business advertising without the address. In discussing these apparent "slip-ups" we have been assured that everything will be in order by the time the next directories are ready to be issued. It was explained that in some cases, where contracts are placed for more than one directory at a time, these ads are sold many months prior to the issue date and mistakes can occur. However, every precaution will be taken to insure against these mistakes in the future.

LETTER FROM FALLON NEVADA

A few weeks ago I received a letter from Max A. Piper, Captain, USN and Commanding Officer of the U.S. Naval Auxiliary Air Station in Fallon, Nevada. You may recall, in the March Issue of MESD, we reported a conversation with Mr. Bud Pritchard of Bud's TV in Fallon where he stated that he was in competition with naval personnel. In the letter from Captain Piper he stated that, "Mr. Pritchard's allegations made several months ago were thoroughly investigated by official naval and air force personnel and the results submitted to the Navy Inspector General in Washington, D.C. You may be interested to know that not a single allegation was found to be true nor did any of the other Fallon TV repair businesses concur with Mr. Pritchard's statements or complaints." I want to assure the Captain and Mr. Pritchard that MESD does not wish to become the middle man in this controversy. However, I do know of instances where service personnel did participate in outside businesses and can not understand why Mr. Pritchard would want to "manufacture" such an idea and feel there must be a basis for truth. On the other hand, we have not received any comments in regards to other instances and do not know whether or not Mr. Pritchard has received any comments from other readers following the publishing of our editorial. We hope that any mutual problem will be resolved to everyone's satisfaction.



dates

dealer news

programs

FRESNO CHAPTER GOES ALL OUT FOR TELETHON

The Fresno Chapter of CSEA recently went all out to help the Cerebral Palsy Telethon. Starting from scratch the chapter members obtained over 20 TV's, installed them as "monitors throughout the auditorium, hooked up a special antenna system to insure top reception and recived the praise and gratitude from everyone connected with the show.

Over 2,000 feet of feed line was necessary for the installation and three fine distributors came to the rescue to provide this material. Inland Electronics, Mid-Cal and Jack C. Arbuckle Co. all pitched in without a hitch and insisted on providing anything else the boys needed to complete the arrangement.

The Telethon itself was a real mad-house especially near the end but to show their appreciation the station ran a CSEA spot with the "bug" just as they hit the \$50,000 breakthrough.

In addition to setting up the system the chapter kept a man on duty at all times in case of a breakdown. This type of community spirit and CSEA spirit is certainly commendable and is indicative of the type of work being done, not only in Fresno, but all over the State by CSEA chapters.

Zone "B" Changes Meeting Date

The Zone "B" Council of CSEA at their last meeting moved to change their monthly meeting date to the second Tuesday of each month which will make the next meeting of the group on April 9th in San Mateo.

This move was made in order to better coordinate the activities of the Zone and the reporting action to Modern Electronic Service Dealer. In the past, news would arrive after closing dates and would then be over six weeks old before it would be in print.

Delegates Meeting A Success Numerous Topics Covered

The recent Board of Delegates meeting in Fresno proved to be one of the best held in recent years and a great deal was accomplished.

Zone "F" To Open Office About July 1

The Zone "F" Council of CSEA approved a plan that would establish a zone office. Recent discussions, in regards to a dues increase in order to finance such an office, have produced a desire for such a facility but, it was felt, the funds would not be available until July 1.

KEYS, HOY AND LANAM RE-ELECTED TO CSEA BOARD

Mr. Wes Keys, Mr. Ralph Hoy and Mr. Claire Lanam were re-elected at the recent Zone "B" council meeting to represent that zone as members of the California State Electronics Association Board of Directors.

All three of these gentlemen will complete their present year on the Board in June and will take on the duties once again, Wes Keys represents Walnut Creek, Ralph Hoy from San Rafael and Claire Lanam of ACTRA, on the Zone B Council.

CSEA Chapters Welcome New Members

Four new members join CSEA during the past few weeks and we want to welcome them to the organization.

Joining from the northern part of the State was Wayne's TV of Sacramento and from the southern part of the State: Fremont Electronics of So. Pasadena, Whiteys TV of Whittier and D and B Radio-TV Co. of Los Angeles.

With over seventeen chapters in attendance, delegates listened to a report by President Claire Lanam in regards to recent Board of Directors action, the state of our present licensing laws, the re-payment of loans made by different chapters to the State during the last licensing bid and the progress being made in regards to the law suit filed against CSEA by a Sacramento Service firm.

It was his belief that we are closer to a licensing bill today than ever before and that important news should be breaking very shortly. That our State office was working extremely hard to bring about a successful bid during this legislation period and that everyone should be encouraged with the work being done.

Mr. Lanam also was pleased to announce that funds were now available to re-pay all chapter loans made several months ago plus interest and that the Association was in very sound financial condition.

Individual chapters reported on the progress of their particular group with special note taken of several successful color schools.

Certain by-law changes were made during this session and others taken under committee consideration. The controversial resolution that would call for a general convention each year was defeated for lack of complete information to new delegates. Because of this, it was returned to committee and scheduled for a re-hearing on June the 8th at Fresno.

Board of Delegate officers were also elected and include: Ron Kealy as Chairman, Cap Loughborro as Vice Chairman and Virgil Gaither as Secretary.



CLAIRE W. LANAM

A Letter From The Attorney General's Office Views AB 1359

Dear Mr. Martin:

I thought I would call your attention to what was undoubtedly an inadvertent error in the March edition of *Modern Electronic Service Dealer*.

In discussing the dealer workshop sessions of the Pacific Electronics Trade Show, I am quoted as saying, "There will be a licensing law." In fact my statement on that subject was that the Attorney General would support some legislation in the television and radio repair field. I also predicted that legislation of some nature would pass at this session. I was careful to avoid limiting my comments to licensing laws.

Since that time an approach to the problems of fraud in the television repair has been made in a bill introduced by Assemblyman Anthony C. Beilenson of Beverly Hills and co-authored by 14 other Assemblymen. It would seem that the approach taken in this bill, AB 1359, will solve a major part of the problem without the expense of an administrative agency and a statewide staff of investigators.

This law will give local police departments, who are the closest to this problem, the teeth they need to crack down on fraudulent operators and at the same time it will constitute a minimum interference with private enterprise as compared with other proposals which have been made in the past.

Sincerely,
STANLEY MOSK,
 Attorney General
 By **VINCENT W. THORPE**
 Deputy Attorney General

The Wheel of Fortune

As we go along in life, it is not all a bed of roses, even those born with a "silver spoon in their mouth" are subject to the whim of Lady Fortune. We go into business with the hope of ultimate success in providing us with the means that is necessary for our way of life.

Again Lady Fortune gives us good days and bad days. She may smile and it is all sunshine, but no matter how Lady Luck is, nothing is ever won without a lot of sweat and trouble. Fortunes are not made in a day and the Lord took 6 days to make heaven and earth and all there is there-on. It is only by looking back over the years that one can great strides of improvement.

Some may steal our thunder temporarily, but the important people know who is really the prime mover and they will come back to us. Maybe other groups will claim to be the originators, but they can only fail, unless we furnish the brains and labor to promote that which we want in our field of endeavor.

I have noticed steady improvement in membership, a much greater number of real down-to-earth ideas. The Delegates are not just for By-Law manipulation but to amass information for study of our general policies.

Our finances are in the best shape they have ever been, as has been pre-

dicted and it is shown by our Home Office we are financially sound, all notes are being paid this month.

The office with the aid of our assistant Executive Director Darrell Petzwal and the able and excellent leadership of Keith Kirstein has enabled CSEA, by following the correct policy to bring our affairs in order, rapidly and efficiently. Keith has spent his own money and much time to bring our issues to a successful culmination and there is no one that can match his dogged determination to aid CSEA. A faithful ethical Executive Secretary who will never be matched in our group again for many a year; and a man completely above the petty squabbles of any small time degrader.

Let us all join in congratulating ourselves on what we have accomplished since several years ago. The great question now is the registration Bill and the Suit. It is impossible to say much, too much can be misconstrued and this could destroy all chances of success.

But have faith in our leaders, we are progressing rapidly. Don't wait to swell the War Chest fund, lets do it now when we need it the most. Many thanks to those who have already given. Let's get on our toes and Go for our final goal. As former President Franklin Roosevelt said, there will be lots of Blood, sweat and tears. There will be lots of work.

Refreshments will be served and all dealers in the area are invited to attend.

Styles and Engelman Move to New Quarters

Styles and Engelman, Inc. well known San Leandro Distributor has just moved to new and larger facilities at 25354 Cypress Street in Hayward.

The new building is over 10,000 square feet and there is over one acre of free parking. It is located just off the Nimitz freeway.

EDISCO TO HOLD HIKOK SEMINAR AT TOWN HOUSE

Edisco of San Francisco will host a Hickok Seminar at Del Webb's Town House in Downtown San Francisco on April 10th at 7:30 p.m.

According to Fred Rohrbeck, "at this meeting dealers will have an opportunity to see the latest in Hickok test equipment as well as listen to an outstanding speaker direct from the Hickok plant in the east."

NEWS NOTES FROM PASADENA

The Pasadena chapter of CSEA, under the leadership of president Bob Kealey, will present a series of technical programs, similar to the Calibration of Test Equipment program held recently by the chapter, over the next few months. It is felt that this type of change of pace will attract new members and will keep the old timers coming back.

On Saturday evening, March 30th, the Pasadena chapter will install its new officers for the next year. The event, to be held at the Huntington-Sheraton Hotel, will see Bob Kealey installed as the new president along with Bill Lawler as 1st Vice President; Chester Sheppard as 2nd Vice President; Lee Lopez as Secretary and Bill Schirring as the new Treasurer.

A note of interest is that Eay Doyle of this chapter is taking it easy in Hawaii.

CHAPTER OFFICES
SAN DIEGO #13
3318 Idlewild Way
274-2320
San Diego 17
NORTH COUNTY #18
930 S. Santa Fe Ave
Vista, Calif.

California State Electronics Association

SAN DIEGO NEWS

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

VOL. 2, NO.7

APRIL, 1963

Editor: ED FORT, JR.

Possibility of A National Association of Associations Viewed

By ED FORT

It is with mixed emotions that I view our participation in the national association effort. Admittedly there are many good reasons why a national organization must inevitably come into being. I for one am one hundred percent in favor of it. However, a national association of associations can be only as successful as its individual state associations. For if the state groups fail then so does the national. Therefore it behooves us to study this national program from every possible angle. To find what to expect from a national association let's first study the report from the Purpose and Aims Committee. The following is a list compiled at the organizational meeting last January.

1. To unite all state electronic service associations in a common bond.
2. To acquire, to preserve and disseminate valuable business and service information to state associations.
3. To establish a national liaison body for the service industry, manufacturers and governmental agencies.
4. To maintain the highest possible standards of the electronic service industry.
5. To create and maintain a friendly atmosphere within the electronic service industry.
6. To encourage training programs.
7. To establish standards and definitions for the service industry.
8. To establish and inform the public of fair service policies.

Now this is certainly a very worthwhile and legitimate program and I'm sure we would get no argument on that score. True, most of these things we are already doing on a state level. However, being national does add a little extra prestige and authority. To do these things a strong central organization with an extremely capable executive secretary is mandatory. It was noted at this meeting that the lack of these qualities was the principle reason for past failures in this area. We can presume then from

this analysis that these mistakes will not be made again.

This then brings us to the part of the problem that disturbs me. Financing . . . \$50,000 a year would be a very conservative estimate on what it would cost to staff and maintain an office. This is based on the barest minimum of essentials. It was also noted at this meeting that there were at least 3,000 individual members represented. This amounts to approximately \$1.50 per member per month. But let's, for the sake of argument, use the figure suggested by the representative from Iowa; at least \$1.00 per member per month. As I mentioned earlier, a national association is only as strong as the individual state associations. It would therefore follow that any action not in the best interests of C.S.E.A. would not be beneficial to the industry as a whole.

Let's see then if we can support a national organization without jeopardizing our own position. Presently our dues are \$2.50 per month per member. With this money we had planned to maintain an office, a secretary, and an executive director. Six months ago it was determined that we were unable to afford this program and as a result our executive director was taken off salary and put on a \$100 a month retainer fee. It was hoped that with this decreased overhead we would be able to return to a good financial condition. Economy was the key word for all operational expenses. And yet after six months of this operation we are still functioning on a month to month basis. Our reserves are non-existent. This then can lead us to only one conclusion. To support a national association we must increase our dues by at least 50%.

The question we must ask ourselves then is this. Will the advantages of a national alliance be of a sufficient magnitude to offset the detrimental effects of increased dues? Lately a number of chapters as well as zones have been considering an increase in dues in an effort to strengthen their local situations. In

MORE BOWLERS NEEDED

Anyone who would still like to bowl or to sponsor a team and has not yet done so, contact Keith Snyder at Wick's TV. The address is 3215 Adams Ave. and the phone no. is 282 2731. Keith is making all arrangements as to time, place, and type of league. This is a wonderful opportunity for lots of fun. Don't miss it.

More Junk Sets Wanted For Schools

Most of the senior high schools have responded to our offer of supplying used electronic components for their use in shop projects. Any shop that has some junk sets of any kind (TV, radio, record player, etc.), please call the CSEA office and tell Trudy where they are and how many you have. We will make all the arrangements for pickup.

CHAPTER 18 FAMILY NIGHT

Chapter 18 is holding another Family Night at the Little Bavaria in Del Mar on the 20th of April, and all CSEA members are invited. There is a special invitation to all members of Chapter 13. The food and fun are both excellent. Don't miss it.

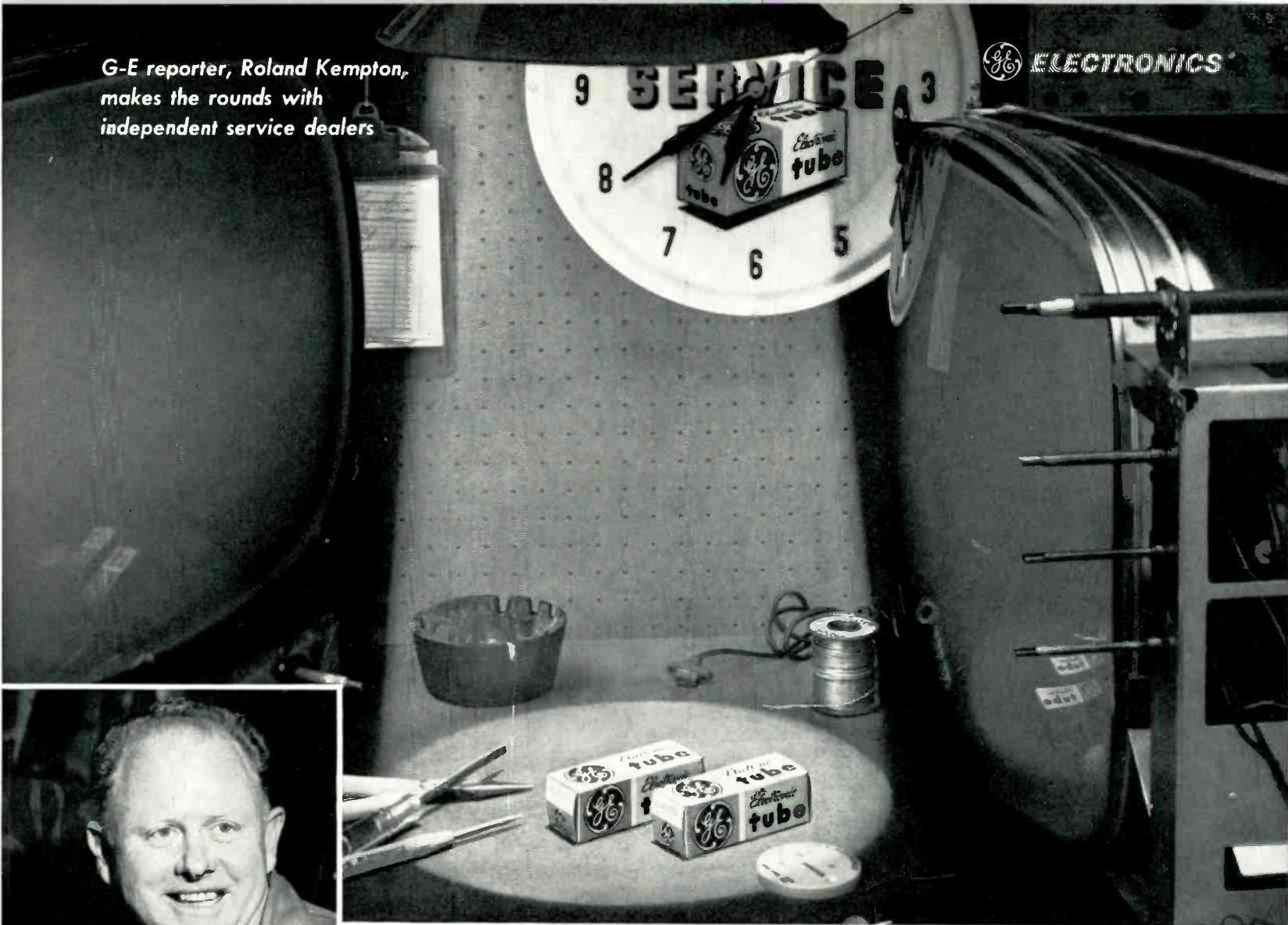
most cases these deliberations have evoked considerable resistance. I feel fairly certain an increase in state dues would meet with this same resistance. Therefore we must be prepared for an internal struggle if we proceed with this program. Is this in the best interests of C.S.E.A.? I don't think so.

I want to say again that I believe a national association is inevitable. However, timing is the important ingredient to success. Let's first contribute all our energies and resources toward strengthening our state organization. And let the other state associations do likewise. Then, with this solid base to work from success would be assured. Let's not make the mistake of trying to build from the top down. This is seldom successful, unless, of course, you're digging a grave.

INDEX NO. 83%

G-E reporter, Roland Kempton,
makes the rounds with
independent service dealers

 **ELECTRONICS**



No callbacks tonight for Jim Liston, thanks
to his in-warranty failure of less than 1%
with G-E *SERVICE-DESIGNED* receiving tubes

"In this business, a reliable replacement tube can make you look like a hero... a callback due to in-warranty failure gives you a black eye, and wastes time and money. So, it's real simple, why I use G-E SERVICE-DESIGNED tubes in almost everything that comes into the shop. I can't afford callbacks."

Jim Liston is the owner of SOUTH CITY TV, South San Francisco, Calif. G-E SERVICE-DESIGNED "universal" replacement tubes help protect his profits—and his reputation. Here are just a few of their typical high-reliability features: (1) Rhenium-tungsten heaters increase tube reli-

ability up to 4½ times. (2) Three- and five-ply plate material provides uniform heat conduction and radiation. (3) Straight-sided bulbs give more uniform heat dissipation. (4) Tapered pins prevent socket damage; save time. (5) Tubes are interchangeable in all sets. General Electric Company, Distributor Sales, Electronic Components Division, Room 1743, Owensboro, Kentucky.

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CONTACT ANY OF THE FOLLOWING DISTRIBUTORS:

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TH 5-3536

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

530 East 8th St., Oakland, Calif.
TE 4-9185

KIESUB CORP.

311 W. Pacific Coast Hwy., Long Beach
ME 6-9697

**WESTERN RADIO &
TV SUPPLY, INC.**

1415 India Street, San Diego
BE 9-0361

COOK ELECTRONICS

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

**WHOLESALE ELECTRONIC
SUPPLY**

265 So. Laurel(Ventura, MA 8-3163
209 W. Cannon Perdido, Santa Barbara,
WO 5-5238

JACK C. ARBUCKLE CO.

2349 Kern St., Fresno, AM 4-6555
500 East 19th, Bakersfield, FA 5-5816

EDISCO, INC.

5901 Mission Street, San Francisco
JU 6-7087

The Story of California's

IRON MONSTER

By

IRV. TJOMSLAND

The tempo of Color talk picked up in mid 1953. Following the short-lived CBS Color Wheel approval in 1950 members of the industry had worked together to produce a "compatible" system and gradually the impression developed that the FCC would approve the new standards about Dec. 17th.

At that time I was working for the Burbank division of Dean Electronics of Long Beach, under Andy Futchik, branch manager.

In our efforts to provide something more than an extra discount on tubes we had conducted a series of information meetings on such subjects as Scope Interpretation, Alignment, and Sweep Systems, and it was natural that we would think of devoting a meeting to information on the new color system. I am sure if either Andy or I had known what would follow the decision to hold that meeting we would have had reason to hesitate!

As soon as I started to plan material for the meeting I realized that I knew almost nothing about the new color system. Much of the material which had appeared had been of a publicity nature and certainly not very helpful in a technical presentation.

In this position I turned to the man who had always been the solution to such a problem, Pete Pedersen. A few days after I mentioned the project he showed up with a nice fat book entitled "A Review of NTSC Committee Findings," and he started to outline the points of the new system.

In two or three nights of reading he had digested the material in the book and presented a working outline of the transmission and receiver operation of the new system.

It was immediately apparent that we had not only all the material needed for one meeting, but also enough for many more monthly meetings.

In addition, since the book contained a complete schematic of the industry receiver we realized that we might build a color demonstrator to follow up the theoretical lecture material.

Andy and I discussed the problems of developing a demonstrator. We naturally felt that the color tube and sweep system would be the main hurdles.

Walt Lessing and Ed Mann of RCA were contacted and it was determined that a Color CRT and Sweep Component Kit were in the L.A. warehouse. For obvious reasons these

could not be sold until the FCC formally approved color, but we were assured that we could depend on delivery if the FCC took favorable action. With this promise we decided to launch the project.

PRELIMINARY PLAN

Pete and I were quite sure that we could rework a black and white receiver for the RF, IF, and Sync functions. With the Sweep Kit we planned to build from scratch, and improvise on the balance.

About this time Larry Vickers of Bell Radio offered to furnish a black and white chassis, and somehow he and his bench man Armond Rea located the RCA T-100. Pete and I had felt would be most suitable for this portion.

Pete undertook a custom alignment project, and by applying every bit of his experience he was able to adjust coupling, capacitance, and resonance to a point where the overall response curve closely approached the ideal as outlined in the manual. This was to remain stable for several years, and never caused a moment's trouble.

The Vertical sweep was rebuilt to the new standards and the horizontal and video systems removed. A cathode follower was installed to couple the video to the color processing system.

About this time I received a call from Glenn Gossard, in charge of Quality Control at Standard Coil. He said, "When you build that color set you are going to need a set of inductances. We 'just happen' to have a complete set of experimental units that you can have." I hadn't realized it, but when he brought in the kit there were more than fifty different items, including peaking coils, convergence controls, band-pass couplers, traps, and many other associated items. I am sure this kit reduced our working time by 50%, and I hadn't been aware of the problem until Glenn called!

Bill Barron and Chet Jur were associated those days, and they turned up with "samples" of delay lines and solved another problem.

John Colbert of Triad came drifting in one morning and said that if we were strong enough to carry it in, he had a power transformer for the job. The 200 volt secondary winding had a resistance of less than 1/2 ohm and appeared

How To Talk



ANTENNAS TO YOUR CUSTOMERS

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

GHOSTS

Although many of us are familiar with and have been annoyed by TV ghosts, most of us have avoided learning what causes them because of the deep cloak of mystery which seems to surround electronics and TV. With the information contained in Part I of this series you have all the information necessary to understand what causes them.



GHOSTS

Annoying multiple images which appear on TV screen.

We have learned that TV signals are like light . . . that is they are reflected or "bounce" off certain objects such as buildings or hills.

To understand how this effects your TV picture imagine that you were in a room with several mirrors and that an electric light was flashing on and off. Your eye would see the light and the reflection in the mirrors go on and off at "exactly" the same time.

Actually, the light in the mirror and the light coming to you directly from the flashing bulb does not go on and off at exactly the same time. The bounced light arrives slightly

later since it had to travel further, that is from the bulb to the mirror and then back to your eye. Since the time delay is only about one millionth of a second, the eye could not tell the difference.

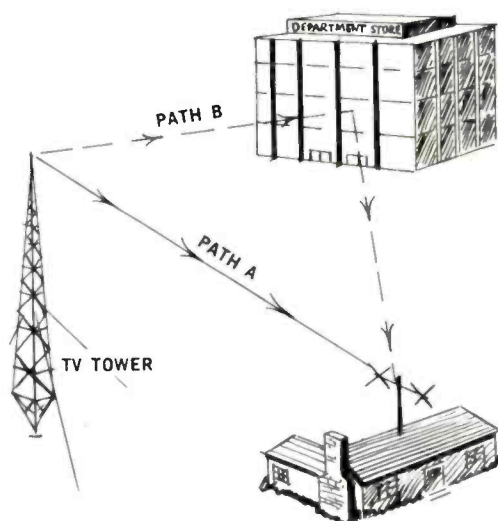


Fig. #2.
Reflected signal (Path B) travels further than direct signal (Path A) and therefore arrives later.

When a TV signal bounces off a hill or a building your TV set is sensitive enough to "see" the second signal even though it arrives a millionth of a second later. Unfortunately the TV set cannot distinguish between the wanted (direct signal) and the unwanted (reflected signal) and therefore puts them both on the TV screen one after the other. The second signal is the ghost. If the signal comes in from several reflected points it is possible to have three or four ghosts . . . a situation fairly common in hilly areas.

SUMMARY

Ghosts are caused by a TV signal arriving at an antenna from two different directions, one slightly behind the other. The TV set picks up and shows both.

The following article is reprinted from the January, 1963 Issue of TSA NEWS published in Detroit, Michigan. The article was so well received that several California Dealers, who had read it, suggested it be published in MESD. Although it is against our policy to reprint material from other publications we felt that the message is a good one and would be of value to our readers.

..... A
..... TIGER
..... BY THE
..... TAIL

By
FRED H. O'KELLEY, JR.
Mgr. Dist. Product Sales
Elect. Tube Division
Westinghouse Electric Corp.

Many years ago, in a Federal courtroom in New York, a sardonic district attorney presented to the jury a glass gadget which looked something like a small electric light bulb. With masterly scorn he accused the defendant of claiming that by use of this "worthless" device, the human voice would some day be transmitted across the Atlantic. He said that gullible investors had been persuaded by such preposterous claims to buy stock in a company and urged prison terms for the defendant and his partners. Two of the associates were convicted, but the inventor got off with a severe lecture from the judge . . . the defendant in this case was Lee de Forest; the "worthless glass bulb" was the audion tube, greatest single invention of the 20th century and the foundation of today's multibillion dollar electronics industry.

That district attorney was not the least concerned about the problems of today's electronic parts distributor or the electronic service technician. Isn't it interesting, however, that the industry in which we live was conceived in toil and judicial lectures? Its labor pains were majestic, to say the least, and after birth the infant grew with such prodigious force that the very people connected with it couldn't believe their eyes . . . let alone keep up with a monumental miracle.

I wish to pose a question first, and then attempt to probe for a few answers. My question: "What in the hell is wrong with our industry?" Distributors are fighting with their suppliers . . . suppliers are fighting with their distributors. Service dealers are fighting among themselves as well as with their distributors and the manufacturer. Every day some newcomer comes into our market with a new idea—a new way to do it . . . and the fights among those locked into your system begin all over again. What's wrong?

Every day we all hear the loud wails of distributors who are being pressed on all sides by aggressive competitors. Every day we all hear the service trade hurl its invectives in all directions . . . we all see the emotional outbursts and the demands for support and protection . . . we all listen to the tribulations, the accusations, and the cross-accusations.

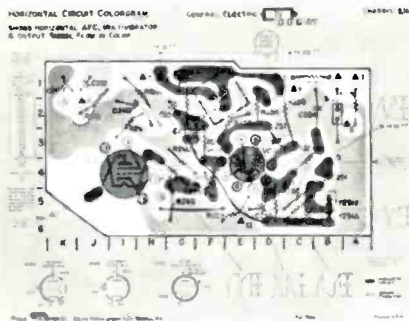
I insist that this is silly business for an industry as great as ours. We are acting like a bunch of immature kids who set up a howl when somebody takes our candy away from us. We get mad at Daddy when he turns his back on us while some kid down the street flails us with his fist. Seriously, let's see if we can get at what's wrong here.

Let's face it—our industry is *new* and immature when compared with almost any other you can think of. The business grew so fast and changed complexion so often that there simply wasn't the time to develop sophisticated business acumen as might be found—say—in the automobile business. The pioneers and old timers that built our industry were standing all by themselves and alone with one of the most vicious tigers by the tail that modern civilization ever produced . . . and they didn't know it!

OK—we've been immature, but that doesn't mean that we need to stay that way. The economic pressures today are such that only those who "grow-up" rapidly and face the fact of life on a daily basis will survive.

Our actions have frequently defied the laws of gravity, and perhaps more importantly, the basic and simple laws of economics. Every business man in our industry, whether he be distributor or service dealer, must recognize what his purpose is—why is he there?—what contribution does he make? Can he make a profit?—Is there a better way

*why
troubleshoot...
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Santa Maria

to do it?—Can he survive with present practices?

Parts Distributor

Let's look for a moment at electronic parts distributor. Most of these businesses began in the early thirties, and from the very outset, electronic parts distribution was known as "high cost" distribution. The distributor requires a higher gross margin on sales than any other form of distribution that I know of—such as grocery, beer, electrical, and auto parts distributors. This means that he must get high prices for the parts he sells for resale. Now why is this?

Part of this high cost in some cases may be the results of poor management and poor controls on the part of the distributor. On the other hand, the service trade seems to want to be mollycoddled by the distributor—and this is costly to him. They want instant service, credit, free delivery, premium merchandise, more credit, technical assistance, still more credit, larger discounts, better prices, frequent salesmen's calls, a lot of attention, and still more credit . . . and if he finally runs out of credit, he just might sneak his orders in the mail to a mail order house—with cash. He imposes on his distributor many, many small tedious orders which are costly to handle instead of ordering on a systematic and methodical basis. A recent study showed that the average sale for a parts distributor amounts to \$3.20. This compares most unfavorably with large retail department stores that average \$8.50 per sale.

Today, the electronic parts distributor is in trouble. He must either get his costs down—or he has no choice but to support his gross margins with over-the-counter sales to the retail trade. The service technician would howl about this, but really, what has he done individually or as a group to allow his distributor to get his costs down? Remember what I said—his retail sales produce higher gross margins than he gets from the service technician. Thus he survives and is still able to supply his customers with all the luxuries they demand . . . including better prices. Is it smart to force the distributor to retail selling in order for him to survive?

I am not making a case for the distributor—some of them are ill-advised and are not good businessmen. I am only trying to deal in practical economics. Again I say, observe the practices of the wholesale grocer who resides in low-cost housing down by the railroad tracks. You can bet your last dollar that his customers get little or nothing from him but the time and place utility he provides with his inventory.

Service Dealer

Now let's take a look at the service dealer and some of his problems. For

years it has been the popular thing to do to "lecture" to him, to educate him, to teach him. May I quote from an article I wrote for the May issue of the NEDA Journal:

"The trade has long deplored the plight of the serviceman, and many crusades have been launched to 'upgrade' him. Yet, have we really identified and taken action in regard to his most severe problems? He pays a fairly high price for his supplies and he has very high costs of doing business if he wants to serve his customers well. Regardless of his skills as a businessman, he starts out with a couple of economic strikes against him. We play him a violin solo, hand him a gold key, identify him as a 'legitimate' and then make it difficult for him to do business. I contend that if we give him the simple economic tools he needs to work with, the serviceman can easily upgrade himself."

To paraphrase a statement I read recently . . . "People who call themselves hard headed realists have proved—mind, I said *proved* on former occasions that the thirteen colonies of the United States could never be united, that slavery could never be abolished, that no gentlemen could ever settle a personal quarrel except with a pistol at forty paces, and that the electronic service dealer cannot possibly make a profit. These hard headed realists have proved that the flying machine was a physical impossibility, that the steamboat was a dreamer's folly, that the telephone was a passing fad . . . and that the electronic service technician cannot possibly make a profit and survive as a business.

This last statement is obviously the paraphrase to which I referred—but I say "Poppycok!" The so-called hard headed realists are sincere enough but they lost sight of social and economic evolution. To put it more simply, they end up wrong because their minds cannot accept the change.

The electronic service technician or dealer who recognizes his place in the distribution structure, and who continues to EARN the right to be in the business, will not only survive—he will survive with notable profits. BUT, he must be a businessman and a merchant. He sells both service and product. The competition he recognizes springing up around him rarely, if ever, provides both product and service. What, then, is his most important economic contribution? The very service he renders.

Today the American population is spending over half of its disposable income on services rather than product. We pay the banker, the lawyer, the barber, the auto repair shop, the hairdresser,

the housemaid, the telephone company, the doctor, and the TV repairman OVER HALF of our income for services rendered. Yet, the serviceman's most precious possession, his skill and knowledge and ability to provide a *service* is frequently sold for a mess of pottage while he attempts to derive a profit from the sale of some *component* product at prices where somebody else can beat the pants off him. Let me illustrate.

Not long ago, I took my old Buick in for a check-up on some trouble in the rear-end. I learned that I needed a pin replaced somewhere, and that the cost of the pin was 65¢ . . . fine I said, go ahead. I'll be reckless and spend 65¢. But, Mr. O'Kelly, the serious minded service manager said, we have to pull the rear axle plus the drive shaft . . . quit a job . . . and the service on the job will cost you \$125.00.

I chose an exaggerated illustration to make a point. This pin probably cost the factory less than a nickel to make. The distributor probably paid a dime for it, and the service dealer probably paid 15 cents for it. Now, I come along and the price has been marked up 400% and the price to me is 65¢.

If the Buick service dealer acted like some of our electronic service dealer friends, he would have charged me \$1.50 for the pin . . . or 1000% markup . . . and thrown the service in for nothing . . . JUST LOOK AT THE PROFIT ON THE PRODUCT SALE!!! Obviously I'm not *against* product sales . . . just look at the margin, for instance, on the sale of a prime manufactured picture tube. Product sales help, to be sure, but the ability to render a service is the serviceman's most important economic asset. He should be paid accordingly.

Tube Checker

What about these tube checker machines? Again the technician is howling and not without some reason. But listen—whether you or I like it or not, 30,000,000 receiving tubes are being sold annually by this method. The tube checker is getting as common-place on the American scene as the super-market . . . and the service trade usually stands idly by and demands that the distributor or tube supplier do something about it. Isn't this a little like outlawing the automobile? The public has *accepted* the tube checker—now let *us* accept it.

When the service technician hangs out his shingle, he is on his own and succeeds or fails based on how he performs—not how his distributor or the manufacturer performs. Many, if not most, servicemen and distributors *are good* businessmen and as such do the things they must do to sustain their businesses on a profitable basis. It is my sincere hope that each of them continue to thrive, to grow, and to prosper.

STOLEN MERCHANDISE REPORT LIST

| Stolen from | Date | Make | Model | Serial No. |
|--|---------|----------------------------|------------|------------|
| Ludlow TV Sales 9335 Long Beach Blvd. Long Beach, Calif. | 1/21/63 | P.B. | 19T9A | 155204 |
| Gillon Radio Palmdale, Calif. | 11/9/62 | Z-TV | K2211J | 5960942 |
| | | Z-TV | K2717W | 7007589 |
| | | Z-TV | K2109J | 5999532 |
| | | Z-TV | K2020J | 5881509 |
| | | Z-TV | K2005F | 5956321 |
| | | Z-Stereo | KP580C | 0268 |
| Powers TV 3619 Cutting Richmond, Calif. | 12/8/62 | GE | M502XBN | 981336 |
| | | GE | R608XVY | 634356 |
| | | GE | M206XON | 549527 |
| | | Du Mont | Bon Voyage | 296033 |
| Leon Block Radio Service 3801 W. Jefferson Los Angeles | 1/2/63 | Guide Eye Checker | | AE 5369 |
| | | Eico 6-12V Pwr. Supply | | |
| | | Heath Signal Tracer | | |
| | | N.V. Pic. Tube Checker | | |
| | | Delco Radio | | 983945 |
| | | 20 New Motorola Car Radios | | |
| | | 200-300 Assorted Tubes | | |
| Hoyt's Corner Superette 9700 Main St. Lament, Calif. | 2/9/63 | Motorola | 421T18M | D140294 |
| Page TV Service 5534 Monte Vista Street Los Angeles 42 | | Zenith | K1620K2 | 7393408 |
| | | Zenith | H2214G | 3661922 |
| | | Zenith | H2105L | 3780301 |
| | | Zenith | H3308Y | 3628718 |
| Victor Hardware & Appliances P.O. Box 97 Victor, Calif. | | Zenith | K1620Y2 | 7549511 |
| | | Admiral | P908 | 10043435 |
| | | RCA | 3RC51 | 008382 |
| | | Zenith | K725L | 22141806 |

TEAR OUT AND SAVE FOR FUTURE REFERENCE!

Stolen Merchandise Report Form

Store: _____ Date Stolen: _____

Address: _____

| Make | Merchandise Model | Serial No. |
|-------|-------------------|------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CLIP AND MAIL

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



STANDARD KOLLSMAN . . .

all-channel converters have an attractive carry-out package which can double as a compact point-of-sale display piece. The easy-to-install converters, available in two models, make Ultra-High Frequency stations compatible with present VHF sets through attachment of the unit to the antenna lead of the video set. The Standard Kollman converters are priced at \$39.95 for the deluxe model "A" and \$29.95 for the budget model "B". They will be available through electronic distributors.

SERVICING COLOR TV . . .

receivers need pose no threat to the competent TV technician. The sudden upswing in color TV buying, however, does mean that TV servicemen must prepare themselves for the increased color work that will inevitably come their way.

"Color TV Trouble Clues," prepared by the PF Reporter Editorial Staff, will aid both seasoned technicians as well as newcomers to the field. It is a guide to the typical color troubles that plague all servicemen. The introductory section shows how color TV circuits are merely old circuits with new names. Another section describes the test equipment required for successful and profitable color servicing. This is followed by sections on alignment, sync trouble, convergence, and general trouble-shooting in the color stages of a receiver.

Also included are sections which contain information on servicing color sets in the home, with many actual case histories. All these combined make this a comprehensive and informative book—one that every TV serviceman will want to speed his servicing time and increase his profit.

9 sections include: Introduction; Test Equipment; Service Aids; Alignment; Logical Troubleshooting Procedures; Sync Troubles; Convergence; Servicing in the Home; and Case Histories.

"Color TV Trouble Clues" is available from electronic parts distributors and

bookstores throughout the country, or from Howard W. Sams & Co., Inc., Indianapolis 6, Indiana.

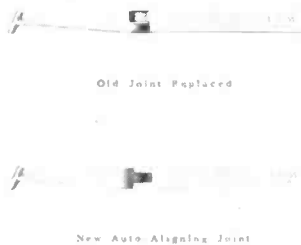
Review copies available on request from: Technical Book Division, Howard W. Sams & Co., Inc., 4300 West 62nd Street, Indianapolis 6, Indiana.

THE 1963 "EVEREADY" . . .

Radio Battery Program offers dealers five outstanding in-store merchandisers. One is the striking new "Eveready" Security Showcase, recently announced by Union Carbide Consumer Products Company, Division of Union Carbide Corporation. A complete battery center for all popular transistor battery types, the handcrafted hardwood displayer measures 15" high, 24½" wide and 10½" deep.

It is dustproof and pilferproof, yet the clear view cover invites customers to see and buy. A precision-calibrated radio battery tester is attached to the unit. Easy-serve channels, quickly refilled with batteries, operate with gravity-feed action and there's extra storage space behind sliding doors in the back of the cabinet.

The new "Eveready" Security Showcase is now available to dealers ordering the No. 84 battery assortment.

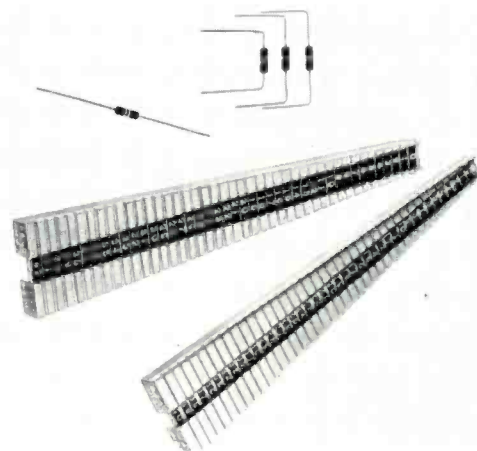


TO ELIMINATE . . .

a soldering problem . . . Clauss anti-wick tweezers have been improved with a new patented cross-over joint preventing lateral slippage at the wire-holding end of the tools. Also, these four sizes of anti-wick tweezers (#AW17—for 16 and 18 wire; #AW21—for 20 and 22; #AW25—for 24 and 26; and #AW30—for 28, 30 and 32) are now made with the correct conductor contact area to permit users to meet NASA soldering specifications. The conductor contact area ranges in length from .0625 in the #AW17 down to a minimum of .0312 in the #AW30. Both these improvements were built in without any change being made in the solid beryl-

lium copper construction of these tweezers providing more continuously effective heat absorption than tools fashioned by brazing small copper ends to steel cross-over tweezers.

For further information, write The Clauss Cutlery Company, Fremont, Ohio.



RG-CO COMPANY . . .

of Los Angeles has made available a new component lead bending gauge which is reported to produce labor savings up to 65% in preparing component leads for circuit board stuffing.

The RG-CO precision lead forming gauge is a simple hand operated device which requires no other tools and positively assures against nicked leads, off-center or misformed leads and other physical damage to components.

The Mark I is simple to operate: the component is placed into the predetermined size slot and the leads are rapidly formed with gentle finger pressure over the radius bend. 1200 components may be prepared per hour for circuit board insertion.

The lead-former may also be used to accurately measure proper length of lead bend by placing the tapered gauge over circuit board holes and reading off exact size required.

The Mark I was designed specifically for ¼ watt resistors and diodes (standard JEDEC package) and has 40 gradients ranging from .45 to 1.52 inch centers. Each position is numbered to meet individual requirements.

For detailed information write: RG-CO, P.O. Box 1206, Canoga Park, California.

LITERATURE . . .

covering a completely new line of television distribution equipment for homes, motels, apartment buildings, and hospitals, is available from the Distributor Sales Division, Jerrold Electronics Corporation, 15th and Lehigh Ave., Philadelphia 32, Pa.

MODEL 202-LB . . .

Self-Service Tube Tester has recently been announced by Mercury Corp. The Model 202-LB tests all tube types including the latest NUVISTORS, NOVARS, COMPACTRONS and SYLVANIA 10-pin tubes. Also included are provisions for the test of 6 and 12 volt vibrators, fuses and pilot lights. The panel is etched aluminum and has 63 phosphor-bronze beryllium sockets to assure long life. The unique circuitry of the #202-LB allows it to accommodate new tube types as they come out.

The modern lo-boy cabinet design is attractively finished in a light green and white color combination with gold trim. The tube compartment has three sliding drawers with tube dividers and drawer sheets for automatic inventory control.

Easy-to-read quick flip tube charts list over 1200 tube types with new tube charts available periodically. A multi-color illuminated display sign tops the cabinet. Overall dimensions of the #202-LB are 61" high x 20" wide x 19½" deep.

The Model 202-LB is available at electronic parts distributors at \$184.50.

A U.S. PATENT NO. . . .

3,041,042 has been awarded to Clear Beam Antenna Corp. of Canoga Park, California for its unique Miracle Mount Antenna Kit.

This is the first universal do-it-yourself antenna kit designed for easy, fast and safe installation on even the toughest, most inaccessible antenna sites. Ruggedly built, the versatile Miracle Mount Kits are quickly and easily adaptable to chimney, wall, roof and attic installations.

This exclusive multiple-mount feature also permits dealers to reduce inventory of antenna hardware and accessories.

Each Miracle Mount do-it-yourself antenna kit is packed in an attractive "easy carry home" display carton.

Additional information on the Miracle Mount can be obtained by writing to Clear Beam Antenna Corp., 21341 Roscoe Blvd., Canoga Park, Calif.

NEW IMPROVEMENTS . . .

to the ever popular "Bow-Tie" Metropolitan UHF Antenna, were announced by Clear Beam Antenna Corp., Canoga Park, Calif.

Re-designed for peak performance, easier installation and mass production methods, the Clear Beam UHF Model UF10, offers an all new one piece "full"

screen that firmly braces mast support for more rigid installation and increases capture area, providing additional gain.

Constructed with an all aluminum dipole, the Model UF10, offers maximum signal transfer. New air space insulator design eliminates the possibility of signal cross, and the Bow-Tie UF10 can be mounted quickly and easily on existing mast below fringe installation.

In addition to new mass production techniques, Clear Beam has increased the standard pack from two to eight units per package. These factors com-

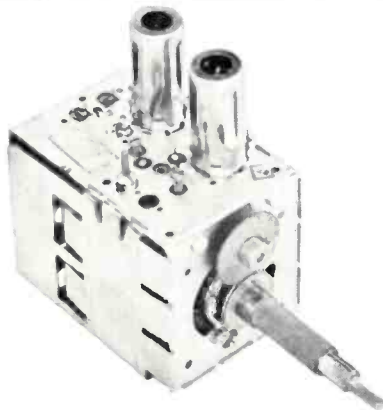
bine to substantially reduce the selling price.

The Clear Beam Model UF10 Antenna is ideal for meeting the varying reception problem of UHF translator stations. Although engineered to cover the entire UHF spectrum, special design features provide peak gain at translator frequencies, channels 70 through 83.

The Bow-Tie UF10 is approved for black and white, or color reception.

Additional information can be obtained by writing to Clear Beam Antenna Corp., 21341 Roscoe Blvd., Canoga Park, Calif.

Tarzian offers
**FAST, DEPENDABLE
TUNER REPAIR
SERVICE (ALL MAKES)**



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.



SARKES TARZIAN, INC.

Bloomington, Indiana

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

ONLY
\$9.50
INCLUDING

ALL PARTS
(except tubes)
and LABOR

24-HOUR SERVICE
1-YEAR WARRANTY

**TWO SERVICE CENTERS
TO SERVE YOU BETTER**

See your distributor, or use the address nearest you for fast factory repair service

10654 Magnolia Blvd.
North Hollywood, Calif.
Tel: 769-2720

IRON MONSTER

(continued from page 12)

Before color was made official we had found it necessary to repeat each month's lecture material four times to accommodate the crowd, and due to limitations of color programs we found it impractical to follow this procedure.

One discovery we made early: there was little or no useful purpose served by trying to teach convergence via the lecture and demonstration method. To make sense the serviceman had to develop the feel for control, not just believe it could be done. After two or three demonstrations to large audiences we changed the format and invited service people, in groups of three to five, in for an evening of setup drill, and felt we enjoyed much better results.

CONVERSION TO 21"

Our original 15GP22A had cost \$265.00, and late in 1954 the 21AXP22 was announced at \$125.00. The natural result was that we converted to the new tube, and adapted the convergence circuitry of the CT-55. To our delight we found that the original 40 degree flyback would readily sweep the 70 degree tube when we re-arranged the tap system. What we didn't notice was that the high voltage tended to go to 37,000 volts, and if the regulator was not carefully adjusted a glow tended to surround the tube when the room was darkened.

The first 21" tube was troubled by gun shorts, so Andy stocked a replacement color tube, probably the first distributor in the territory to do so, and in the course of backing up the demonstrator sold several.

Norb Dean had scheduled a meeting in Long Beach on the fifth floor of a public building and about two hours before the meeting was to start, the CRT shorted, the high voltage system cracked like a gun shot, and the blue gun went out with an open heater winding.

Fortunately it was about five minutes before closing time at Burbank, and Bruce McCalley made the run down with the new tube. It took a change in the brightness circuit to make it operate, but ten minutes before show time it was on the air.

SALE TO THE SRTT

Late in 1956 the Monster was sold to the Society of Radio and Television Technicians of Van Nuys. For about a year Stan Auerbach of Chroma TV carried on the training work in connection with the other SRTT and RTA organizations.

Following this Morrie Bloombaum moved the demonstrator to Pierce College for use in connection with his classes. Last seen, the Monster reposed in the Reseda shop of Hugh McClellan and Dudley Andrews.

During its many travels it could always be counted on to produce a 270 line picture (maximum resolution where color take out traps are employed), and when an alignment project was properly completed on the color circuits could produce an excellent color picture.

The "I" channel gain was always a little low so it took careful adjustment to avoid excess green in flesh tones, but this condition is common in many later receivers.

Because of the inside out circuit arrangement nearly all test points and adjustments were readily accessible for training and instruction.

As Pete and I worked on the project in late '53 and early '54 we felt quite sure that color would catch on, but I doubt if either of us thought that the first big year would not come for nine more years.

It always seemed to us that color sales and service were just a little bit ahead in the San Fernando Valley, and I think we liked to believe that the Iron Monster might have been connected in a small way with that activity.



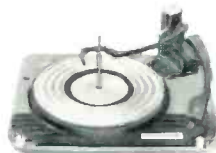
4" Contemporary Styled EXTENSION SPEAKERS

For home, office, shop, music or sound systems. Beige molded plastic cabinet. Connector socket, 8 ohm voice coil impedance; .68 oz. Alnico magnet. With or without built-in volume control. Cabinet size, 5x3½x5¼".



Deluxe 4 Speed STEREO CHANGER M60A

- Plays all speeds, 16, 33, 45, 78
- Intermixes 7", 10" and 12" records
- Shuts off after last record
- Supplied complete with stereo cartridge and sapphire needles.



PHILCO VIBRATORS Tops in quality low in price

Made to Philco standards of quality and specifications. Rigidly inspected and tested. 3 Pin models for 12 Volt General Motors and Chrysler systems, also 4 Pin Model Vibrators for 6 Volt systems.

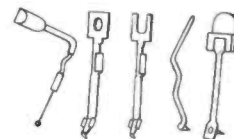


Rotary Switch HIGH GAIN ANTENNA

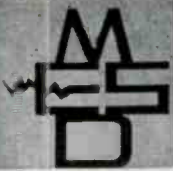
Six position switch for best possible signal with minimum of interference and ghosts. 3 section dipoles finished in brass. Cast-iron base prevents tipping.

PHILCO PHONOGRAPH NEEDLES for all makes

Replacement needles for Philco, Ronette, Astatic, RCA, Shure, Sonotone, Phillips, Piezo, Telefunken, Electrovoice, Perpetuum Ebner, Euphonic and other makes. Sapphire, Diamond and Diamond-Sapphire.



PARTS & SERVICE OPERATIONS
PHILCO
A SUBSIDIARY OF *Ford Motor Company*



Jerrold Units Consolidate New Name; Jerrold-Taco

Technical Appliance Corporation's Consumer Products Division and Jerrold Electronics Corporation's Distributor Sales Division—both subsidiaries of The Jerrold Corporation—have consolidated their operations, effective recently, it was announced by Sidney Harman, President.

In commenting on the announcement, Walter Goodman, Manager of Jerrold's Distributor Sales Division, said that TACO's line of consumer antennas will be marketed out of Jerrold's Philadelphia headquarters under the trade name Jerrold-TACO.

He emphasized that the engineering and manufacturing functions of the consumer line will continue to be based at TACO's Sherburne, N. Y. facility, and that TACO's Defense & Industrial Division "is not affected in any way" by this consolidation.

The first of a series of new products, directly resulting from the consolidation, should be on the market later in 1963, he added.

As a result of this move, Mr. Goodman concluded, Jerrold-TACO will be the only firm capable of offering a complete line of antennas, reception aids and TV distribution systems for the new color television era, for FM stereo, for UHF, and for the continually expanding black-and-white TV market.

TACO, a pioneer manufacturer of television and communications antennas, was acquired by The Jerrold Corporation in September, 1961. The Jerrold Corporation, through its five subsidiaries (Harmon-Kardon, Analab, TACO, Pilot and Jerrold Electronics), produces a broad line of electronic products and components for the military, consumer, industrial and Government markets.

Kiesub Corporation Shows Sams Series

Kiesub Corp., 318 21st St., Bakersfield, Calif., presented a series of Howard W. Sams TV Review Color Courses on March 20.

The TV Review Color Courses included four short illustrated lectures and the films were: Fundamentals of the color TV system; receiver circuit

fundamentals; color receiver circuit analysis; and installation and maintenance.

Refreshments were served and door prizes given away.

W. A. Mansfield Appointed Ad Promotion Mgr.

Ungar Electric Tools, the Electronic Division of Eldon Industries, Inc., has appointed William A. Mansfield Advertising and Sales Promotion Manager. According to William L. Nehrenz, Vice President and Director of Electronic Products, Mansfield will be responsible for the direction of national trade advertising, publicity, trade shows, etc.

PICTURE TUBE SAVINGS!



COLOR

AND

BLACK & WHITE

- TOP QUALITY
- ALL SIZES
- ONE YEAR GUARANTEE

WHOLESALE ONLY—DIRECT FACTORY TO YOU

Distributors of:

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

PICO Electronic PARTS

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



Kwikheat Develops Soldering Iron

The specifications of the new, highly efficient 40 watt KWIKIE Pencil Soldering Iron are pointed out to "Miss Pets," lovely model, Miss Patti Smith of Encino, California.

Jere R. Davis, newly appointed Marketing Director for the Kwikheat Manufacturing Co. of Glendale, Calif., further stated that the lightweight KWIKIE series is available in 7 different temperatures, all with interchangeable tips to meet exacting lab, production or repair requirements.

The new products, exhibit and nationwide factory Representative-stocking distributor marketing plans all made their debut at the Pacific Electronic Trade Show in the Shrine Exposition Hall.

Technirama '63 Attendance Up 600% Over '62

Attendance at Philco Corporation's Technirama '63 in some areas is running as much as 600 per cent above average attendance at service meetings in 1962.

Technirama '63 is designed to present the latest servicing techniques and advanced information on circuits to the technicians. Philco will hold 130 of these meetings by the end of April.

Mr. Hershcy said that average 1962 attendance has been topped at each of the initial nine meetings. The San Antonio meeting drew 158 servicemen, compared to an average of 25 in 1962, an increase of 630 per cent. The Wichita meeting drew 135, for a 600 per cent increase. Other meetings drew this way:

Hartford, Conn., 200 in attendance, up 590 per cent; Kansas City, Mo., 183, up 500 per cent; Houston, 396, up 314 per cent; Providence, 150, up 240 per cent; Washington, D.C., 123, up 220 per cent; Louisville, 250, up 192 per cent.

Sales Promotion Launched by RCA

Distributor and dealer sales of RCA entertainment receiving tubes will be vigorously promoted during the coming months via a new campaign inaugurated recently by the RCA Electron Tube Division.

Harold S. Stamm, Manager, Advertising and Sales Promotion, announced details of the campaign:

"The new Project IV program," he said, "enables participating authorized RCA distributors to offer independent technicians the completely updated RCA Institutes Color Television Home Study Course. This eight-lesson course will be available free with the purchase of RCA entertainment receiving tubes. It provides technicians with all the information needed to learn the latest techniques of expert color TV servicing."

A wide assortment of promotional, business and service aids have been created for the Project IV program with emphasis on the theme, "Expert Color TV Service." Promotional aids to be made available to dealers include: four acetate streamers for store use; an indoor illuminated sign which gives the effect of constantly changing color; a waterproof truck decal; a selection of seven mats for local dealer advertising; and a window display with four changeable panels containing different service messages.



CLASSIFIED ADS

BUY, SELL, TRADE, HIRE HERE

FOR SALE

TV TUNERS • \$9.95
Rebuilt & Aligned with Factory Equipment per Specifications. Including all parts except tubes. Valley TV Tuner Service 5641 Cahuenga Blvd. No. Hollywood, Cal. POplar 9-4730 *Practical Repairs.

USE YOUR WANT ADS

WESTERN T. V. TUNERS

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

POSITIONS OFFERED

T.V. SERVICEMEN

Hoffman, one of So. California's largest TV service divisions since 1948 needs experienced T.V. servicemen; also one opening for an experienced transistor radio repairman. V PERMANENT POSITIONS

U.S. Citizenship Required
Excellent Employee Benefits
Write Box 15H101
4041 Marlton Ave.
Los Angeles 8, Calif.

WANTED: T.V. SERVICE MAN

Wage guarantee plus commission.

State references.

Phone: UN 5-2210

Orland, Glenn County, Calif.

POSITIONS OFFERED

USED—TV'S

AS IS

WHOLESALE TO DEALERS

100's OF SETS TO CHOOSE FROM
LOW SHIPPING COSTS ANYWHERE

TV BROKERS

4920 W. PICO, LA. 19, Calif.
WE 1-6622

BUSINESS OPPORTUNITIES

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

TV & RADIO REPAIR SALES AND SERVICE

Shop for Sale
Estab. 14 years
Good Lease
Write for appointment
1821 Broadway
Santa Monica, Calif.

HOW TO USE WANT AD PAGE

TO PLACE AN AD

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

RATES

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

Sylvania declares a dividend

through Participating Distributors...



SILVER SCREEN 85 Picture Tubes are made only from new parts and materials except for the envelopes which, prior to reuse, are inspected and tested to the same standards as new envelopes.

Reward for dealers who recognize quality:...popular, fast-moving Sylvania receiving tubes with every SILVER SCREEN 85® picture tube you buy—regardless of size—during Sylvania's Spring Savathon!

This is actually a double dividend. First, you get bonus tubes at no cost—which will move quickly in your servicing business. Then comes the even more valuable dividend of additional satisfied customers—because of the inherent quality of Sylvania picture tubes and receiving tubes. For you, this means fewer profit-stealing callbacks when you stay with Sylvania.

Dealers know: the only good business is dealing with quality. And Sylvania

dealers know that only quality comes from Sylvania. We think it's the only way to do business, and this dividend is our way of thanking you for the confidence you have shown.

But hurry, this is a limited-time offer, available only through Sylvania Distributors who are participating in the Spring Savathon promotion.

Look for this display at your Distributor's—and get bonus quality receiving tubes with every quality Sylvania picture tube you buy during the Spring Savathon!



SYLVANIA

SUBSIDIARY OF

GENERAL TELEPHONE & ELECTRONICS





NEW

JERROLD
TACO

COLOR GUARD



TV ANTENNA

Big performance,
little price



Illustration shows Color Guard Model C-33.

Engineered for metropolitan and suburban areas, delivers sparkling color—superb black-and-white

The day of the old conical and V-cone antennas is definitely over. Today you need something better to pull in satisfactory pictures on modern big-screen sets.

The new Color Guard is just that — something better! It's patterned after the large, rugged fringe-area antennas; but it's compact, a top performer, and budget-priced for high volume throughout metropolitan and suburban reception areas.

Listing from \$7.95 (Model C-31) to \$17.95 (Model C-33), Color Guard antennas give you the flat response and gain to meet your customers' needs at modest prices. Get on the color bandwagon with the JERROLD-TACO Color Guard. See your distributor today, or write:

JERROLD ELECTRONICS

Distributor Sales Division • Philadelphia 32, Pa.

A subsidiary of THE JERROLD CORPORATION

