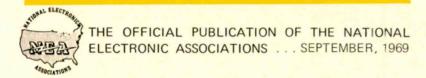
ELECTRONIC service dealer



Check
Points
For
Evaluating The
Serviceability
Of TV
Receivers
See Page 13

EXCLUSIVE FINTH TUNER EXCHANGE

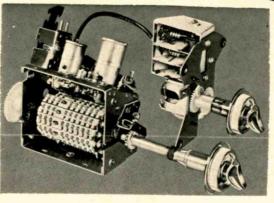
ALL TUNERS REBUILT WITH GENUINE ZENITH REPLACEMENT PARTS!

\$12.95 PARTS & LABOR

(If Required)
TUBES & TRANSISTORS
WILL BE CHARGED AT
NET PRICE

\$9.95
PÅRTS & LABOR

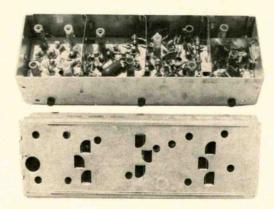
- FINE TUNING RANGE CHECKED ON ALL CHANNELS
- OVERALL RESPONSE ALL CHANNELS SHIELD COVER IN PLACE
- CONTACT SURFACES CLEANED AND LUBRICATED PROPERLY
- OVER COUNTER EXCHANGES WELCOME



Shipping Instructions: Fill out job card, tag tuner, enclose all parts and ship United Parcel for faster service. Send us the defective tuner complete: Include tubes, shield cover and any damaged parts with model number and complaint. Your tuner will be exchanged, returned promptly and warranted for 90 days.

NOW OFFERS Exclusive ZENITH I.F. SUB-CHASSIS EXCHANGES

- COMPLETELY ALIGNED
- OVER COUNTER EXCHANGES WELCOME



\$12.95
Includes Parts & Labor

SHIPPING INSTRUCTIONS — Send us the defective I.F. Sub-Chassis complete: include shield cover, and any damaged parts with model number and complaint. Fill out job card and an exchange will be sent to you promptly. Ship United Parcel for faster service.

Add More Profit to SERVICE | Exchange It!

PHONE (213) 466-9311

ADVANCE TUNER EXCHANGE 1233 N. HIGHLAND AVE., LOS ANGELES, CALIF. 90028

NOTE: Above price does not include shipping charges.

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Business Manager

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241-7783
SEPTEMBER, 1969

ELECTRONIC service dealer

THE OFFICIAL PUBLICATION OF THE NATIONAL ELECTRONIC ASSOCIATIONS..... SEPTEMBER, 1969

EDITORIAL CONSULTANTS

SAM SPINO, Editor of TELSA NEWS of Connecticut; ED CARROLL, HOOSIER TEST PROBE; PETE FABBRI, Editor of the TSA NEWS of Michigan; JOHN P. GRAHAM, Editor of the ARTSD NEWS of Columbus, Ohio; FOREST BELT, of the KETA NEWS of Kentucky; ROGER BREHM, Editor of the NESA of Nebraska; J. W. WILLIAMS, Editor of the TEA TIMES of Texas; BILL FRANK, OHIO SECTION; LAUREN MATSON, KANSAS SECTION; ED VILIMEK, IOWA SECTION; WARREN BAKER, TSA NEWSLETTER; VINCE LUTZ, St. Louis, Missouri; HAL GRUBER, Editor of Cincinnati TESA NEWS.

ADVERTISING OFFICES

Electronic Service Dealer 13543 So. Hawthorne Blvd. Hawthorne, California 90250 (213) 675-8070

EDITORIAL DEADLINES

All regional section editorial material must be in the hands of the regional editors on or before the 15th of the month proceeding publication. Advertising in these sections have a similar deadline.

All editorial material must be in the hands of the Publisher no later than the 20th of the month proceeding publication. Any material received after deadlines will be held for future issues unless space permits its use in current issue.

ADVERTISING INFORMATION

Complete advertising rates, mechanical-requirements and circulation information can be obtained by writing the publication offices. Special insert rates and use of publication mailing list for direct mail advertising information can also be obtained by writing the publication offices.

ELECTRONIC SERVICE DEALER, the Business Journal for the Professional Electronic Dealer, is published monthly by Associated Publications, 13543 So. Hawthorne Blvd., Hawthorne, California 90250. Subscription rate is \$5 per year or \$7.50 for two years. The publication is entered as Controlled Circulation postage paid at Los Angeles, California.

Volume 9, Number 4, All rights reserved. No part of this periodical may be reproduced without the consent of Associated Publications.

letters

Dear Mr. Martin:

I have just become a C.E.T. and member of N.E.A. due to the efforts of Mr. Leon Howland. N.E.A. can be justly proud of him. Enjoy Electronic Service Dealer and would like to see more 2nd Region news.

Yours truly,

Arthur James Crawford, C.E.T.

Gentlemen:

As a result of recent testing, successfully completed, we now have four technicians in our service department who are Certified Electronic Technicians.

It is our wish to advertise this fact with suitable newspaper display advertising using photographs of the men and a background story on the C.E.T. program.

Unfortunately, however, we do not have any material at hand relating the origin, sponsorship, nature, scope, intent and success of the C.E.T. movement. We really don't know much about it and, for the purpose mentioned above, want to know all about it.

Can you help us out? Thanking you in advance, we are, Yours sincerely,

R.M.Cole, Fairfield Electric

Gentlemen:

We are just wondering if you have done any further studies regarding pricing in the United States. Your series of editorials on this matter have been of great benefit to us in running our business.

Gene Douglas, Douglas TV Ed Note: The latest NEA survey on pricing is reported in this issue.

TUNER REPAIRS



\$975

FOR COMPLETE OVERHAUL

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

24-HOUR SERVICE with FULL YEAR WARRANTY

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

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

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

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

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



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

MANUFACTURERS OF TUNERS...SEMICONDUCTORS...AIR TRIMMERS...FM RADIOS

AM-FM RADIOS...AUDIO TAPE...BROADCAST EQUIPMENT

Dear Mr. Glass:

Please accept the thanks of Mrs. Cline and myself for the cordial reception and treatment afforded us at Waterbury. It was sincerely appreciated.

I think NEA had an excellent convention with many interesting and informative sessions. I hope my small contribution added in part to the obvious overall success of the convention.

It is my hope that I can continue to be closely associated with NEA and can offer suggestions and advice concerning apprenticeship and training to the industry.

I certainly was impressed with the enthusiasm and knowledge of the group and feel that NEA is destined to grow rapidly and will emerge as a dominant force in directing the growth of the industry.

Again, thanks for inviting us to participate in the convention. Call on me for assistance at any time.

Sincerely yours,

DeForrest E. Cline, National Apprenticeship Representative, U.S. Dept. of Labor

Dear Mr. Howland:

Enclosed is a copy of the July/August Issue of the NRI Journal. One of the articles in the magazine discusses technician recognition, and we have included a short section on your CET Program. The NRI Journal is sent bi-monthly to 45,000 students and graduates of NRI's correspondence courses in electronics. A large number of these people are no doubt qualified for your certification program. We expect that you may receive a number of inquiries as a result of this article and felt that you should know of it in advance.

I definitely approve of your CET program. There has been a need for something like this for a long time. You have filled this need, and I hope that the article in the NRI Journal will help to expand this program and help it become more fully recognized and accepted. We expect a large number of our students and graduates to be both interested and qualified. We hope you approve.

Cordially,

Louis E. Frenzel, Jr.
Assistant Director of Education
National Radio Institute



Transistor VHF-FM







82-channel solid state





M 118

FINCE





All Silicon Transistor VHF 40 dB Distribu-tion Amplifier



Converter



MAT EQUIPMENT ...THE COMPLETE LINE







82-Channel Antenna Die-Cast Housing





Four-Way Back Match 82-Channel Splitter/ indoor

M-206







Eight-Way Back Match Splitter

from the largest

broad-band or single-channel strip amplifier...

to the smallest

connector or any one of over 200 items!



Dual Output Plate 75 ohm outlet TV 300 ohm outlet FM



M-110 1 Volt per Channel on 9 Channels, 60 dB Distribution Amplifier

A single source for all your MATV needs.

Silicon solid state design.

Built to the highest standards.

Free MATV layout service.

· Heavy duty 75 ohm MATV Antennas.

M-214



Tap - Outdoor Cast

M-213



Matched Line Drop

M-526



Hi-Q Single Carrier Trap, 60 dB Attenuation

M-300



Single 300 Ohm out-put Wall Outlet Plate - VHF

M-552



Variable Attenuator 0 to 82 dB in 1 dB Steps

M-550



State

Transistorized Field Strength Meter VHF

esent a cross section of over 200 MATV items

USE FINCO MATY ANTENNA SYSTEMS FOR HOTELS . MOTELS . SCHOOLS **#OSPITALS · STORES · OFFICE BUILDINGS · APARTMENTS · HOMES**



FINNEY COMPAN

FINCO is the maker of the world famous Color Spectrum Antennas

Send for FINCO'S FREE 45-page illustrated MATV catalogue and layout information forms.

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editorial



DONALD J. MARTIN, Editor/Publisher

A few weeks ago I received a call from a representative of the Electronic Industries Association asking me what their committee could do for the independent service dealer.

In a world that now has "instant communication" from the Moon, let alone through the daily newspapers, television and radio it seems rather silly that we can not communicate within our own industry.

This year I was asked to arrange for the major speakers for the annual NEA Convention and the main objective I had in mind was to have all segments of the television industry represented. As it turned out, we had a representative from television set sales, from the distributors, from the parts manufacturers, from the broadcasters and from the publishing field. Each and every one provided a major segment of the over-all success of the convention and, in my opinion, there was better understanding of each other's problems than existed prior to the convention.

The delegates that attended had an opportunity to convey their opinions and suggestions to these people and in turn, they had an opportunity to say why it could not be done or that they would do everything possible to make the changes suggested.

Needless to say, it is much easier to convey opinions on a person to person basis rather than by written communication but this is not practical for the everyday problems that come up. A direct means of communication must be put into operation at all levels.

Now, don't get the impression that nothing is being done because NEA is doing a major job in one area . . . serviceability. Unfortunately not too many people are aware of it and it's success to date.

Serviceability has been a major project of NEA and a system of reporting problems was devised several years ago through the Techni-Tip program. It began as a monthly mailing of ideas to help service technicians with re-occuring service problems and their solutions. It also summarized existing information put out by factory service departments on production changes

and what have you. The idea was to aid NEA members in doing a better, faster and more profitable job of servicing home electronic products.

Last year this program was expanded and NEA published its now famous "Serviceability Guide Lines" published in the April issue of ESD. This was the most complete report of service problems ever produced by any organization and it has received national support from everyone involved in service work. It has made a major dent in the armour of the national manufacturers since it was on all products and not just one complaint by one dealer about one model of one set manufacturer. The manufacturers are looking for helpful ideas in making their instruments more serviceable but have long refused to take seriously the one complaint concept for change. Through the NEA Serviceability Guide Lines changes have been made.

Now, NEA has gone one step further. Through its national office it has provided "Techni-Tip" forms to the manufacturers themselves. The idea being that when they find a problem and correct it this information should be reported on the Techni-Tip blank and sent to NEA. NEA then reprints this information and sends it out to all of their members nationally. Is this communication? Yes, and in its most productive form since it will save time and money for the technicians and service dealer.

Serviceability activities of NEA don't stop here. At the present time, when a Techni-Tip is received from a member about a particular problem this Techni-Tip is also sent to the manufacturer involved as an aid to him in providing a better product. A good example of this is a recent program involving Monarch Electronics and their SA-10 Amplifer. NEA wrote their national service manager and stated: "The Input Jacks are connected to one side of the 117 volt A.C. line. This causes any other equipment connected to it to also be "hot." If this is true, and such equipment were operated in a restaurant, for example, an employee might adjust the controls with wet hands which could be a serious hazard."

Soon afterwards a letter was received in return from Richard Price, National Service Manager for Monarch who stated that, "thank you for your complaint concerning the SA-10 Amplifier. The SA-10 now is completely being changed to avoid any problems which might be hazardous to consumers. Thank you very much for your comment in the matter."

This is only one example of how this serviceability program is working. There are many others that have been processed with great success and, in particular, has provided the recognition of an industry working together for the betterment of all. It also proves that communication is possible with a positive approach of being helpful rather than a negative approach of being critical.

In my way of thinking, the day is long gone when each segment of the industry could pass the buck to the other. It is senseless for the manufacturer to blame the service industry for not being able to service their products, for the service industry to blame the manufacturer for putting out a poor product, for the broadcaster to blame the service dealer for not tuning the receiver, for the service dealer to blame poor reception on the broadcaster, for the antenna manufacturer to blame the service dealer for poor installation and the service dealer to blame the antenna manufacturer for an inferior product. If one dealer would stop blaming the previous dealer for poor workmanship and if the consumer was made aware of what it takes for them to see the miracle of electronics, this infant industry we are all engaged in would finally come of age.

It is also about time that all segments of the industry come to realize that the only person involved in taking the wrath of all of these problems is the service technician who is always on the firing line. The end user of television, commonly called the consumer, has only one person to attack and you have guessed who he is.

Communication is extremely important, so let's talk with each other and not against.

ELECTRONIC service dealer

THE OFFICIAL PUBLICATION OF THE NATIONAL ELECTRONIC ASSOCIATIONS......SEPTEMBER, 1969

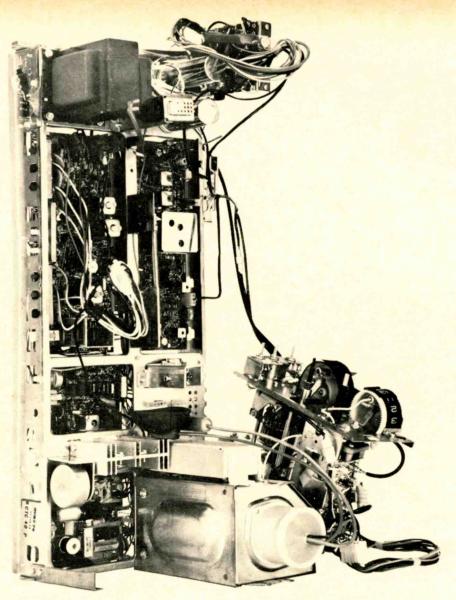
features

- 13 CHECK POINTS FOR EVALUATING THE SERVICEABILITY OF TV RECEIVERS. This is a report made by the Serviceability Committee of NEA to be used as a guideline in evaluating the serviceability of TV receivers. It is hoped that this form will be used by technicians and results sent to NEA for further action. Just one more effort to bring realistic problems to the attention of the manufacturer.
- 15 CSEA SECTION . . . Consumerizm reviewed by President Virgil Gaither. CSEA News Notes by Executive V.P. Ralph Johonnot. California News Notes relates latest BERDR case.
- 23 IOWA SECTION . . . President Clark Pohl reviews recent news about TSA Iowa.
- 25 KANSAS SECTION . . . President Emmett Hughes reviews NEA convention and offers suggestions for Kansas Action. Guest Editorial this month is by Ken Marcy.
- 27 KENTUCKY SECTION . . . Fred Watjen sets pattern for future of our Industry.
- 29 NEA REPORTS LATEST TIME AND RATE SURVEY.
- 30 ELECTRONIC HALL OF FAME OPEN FOR CONTRIBUTIONS.

departments

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- 10 FROM THE V.P.
- 11 NATIONAL NEWS AND VIEWS

SEPTEMBER, 1969



There's more here

What you are looking at is RCA's solid-state* than meets diagrams, pictures, and everything there is to know color chassis-the CTC-40. about our CTC-40.

A whole lot went into that chassis. Like fifteen years of tech-

nical research. Pioneering in the development of Solid State. And the backing of a national workshop program like nobody else's.

That's where you come in.

We've written a technical manual on the CTC-40 especially for Electronic Service Technicians. It has color

You can buy it from your RCA Consumer Electronics Dis-

tributor, but there's a better way.

Attend the next RCA Consumer Electronics Distributor CTC-40 Workshop and get the manual free. Our distributor can tell you when it will be held next in your area. See you there.

one tube rectifier







NEA president's report

ly high. In California too, the percentage is above the norm for the rest of the country.

Some of these people indicated that the very existance of so many associations within our industry might be one reason why we can not get a greater percentage of the total but I don't necessarily agree. It would be nice if we could take every single television association in America and combine them into one national but this is pretty hard to do. In many instances there are local city associations that are not members of a state organization, let alone a national, so it doesn't seem practical that we can combine every one that exists into one. However, I would like to say that there is no reason why we shouldn't all be working towards that particular goal.

During these discussions it was recommended that NEA take a stronger part in developing local association members for the states and this, in my opinion, is not the way it should be done. I don't believe we should go out and sell NEA membership to individuals and then turn them over to state associations. Just the reverse is what should be done and is what is being done in Nebraska, Texas, California, etc.

We can not have a truly strong national association until we have strong state members that represent the majority, at least, of the dealers within that state. The strength of NEA should be coming from the state level not from the national level down to the states. In our own national government today we have given away much too much control to the federal government and the states continue to grow weaker. We can not let this happen in our own trade associations. Let's not be guilty of "letting NEA do it" because NEA is a federation of state associations and it's strength lies with the states.

I would like to recommend that every state association president take a long close look at his own group's activity in obtaining new membership. Let's then have each state association submit their own ideas for building membership to the NEA office in Indianapolis. Let's have all of these ideas placed into written form and resubmitted to the states showing how different states are going after membership and how we can all use their ideas to promote membership within our own state. This is what NEA is for . . . to accumulate ideas from all sources and communicate the answers to problems back to the state officers. A program that has worked in one area may work in another. A program that has failed in one area might work in another. Membership problems are no different than solving a technical problem. Techni-Tips have saved time and effort for hundreds of members and a Membership-tip program might do the same thing.

One of the most important aspects to me of the recent convention in Waterbury was my conversations with many of the national manufacturers' representatives.

The question that continued to pop up was "why do most of the state associations only represent a small percentage of the total number of dealers within that state? Needless to say, it would be great if every state association represented, through membership, 85% of the dealers as against the generally accepted 15% that belong at the present moment. Of course, there are exceptions to this percentage and in Nebraska, for example, the percentage of association members to the total number of dealers is extreme-

from the V.P.

Awards and Recognition: 1969

In the hullabaloo of the annual convention, this year in Waterbury, did you take a good look at the men who received NEA's highest awards? Or in the last issue of ESD with it's many paragraphs devoted to reporting all of the events of the convention, were you able to really realize the efforts that all of the award winners put out this last year? I hope so, because the strength of NEA and the strength of this profession is probably more nearly tied to these men, and to the accomplishments of similar devoted persons than any other single thing.

Why did NEA choose not one, but three "Men of the Year"? They were: Roger Brehm, CET, of Lincoln, Nebraska; Jack Betz, CET, of Waterloo, Ia., and Leon Howland, CET, of Indianapolis. This award was intended by NEA's award committee and by the sponsor, the O. W. Donald Co., of Ft. Smith, Arkansas, to be presented to the "one" outstanding NEA man of the year.

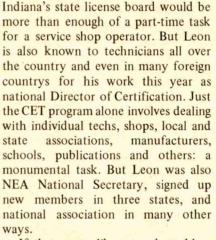
Surely Mr. Brehm is deserving: He put together the rest of the entire 1969 awards program; pushed for the enactment of your present 'techni-tip' program; worked like a beaver to assist in untangling the "Hall of Fame" and getting that project rolling; worked on the CET and Apprenticeship national committees among others; and if that wasn't enough, he lead the state of Nebraska into new and meaningful projects during the year, that amounted to more than has been accomplished in many state associations in a dozen years. If you want to hear more about Roger, the Editor of NESA News, find out what his local work was in 1969!

Is it possible that someone else could match that effort?

The second recipient was Jack Betz, CET. All he did in 1969 was to head the executive committee of NEA, as past president, take over the entire public relations pamphlet program; organize the massive mailing program we now have in NEA; design numerous pieces of material for members, assist in involving the many faceted "serviceability" project; and act as NEA's spokesman, many times, to the press and other industry elements.

And Leon Howland? You would think that just being chairman of

by R. L. GLASS, C.E.T.



If that seems like a tough problem to solve, deciding on the 1969 "Man of the Year," some of the other awards were also.

For instance, NEA's single "outstanding State President"; the "Hal Chase memorial award"; this year we had a tough decision as there were several state association presidents who must have decided that sitting back on their title wasn't the answer to bettering this industry, and who dug into their job with gusto. Another Nebraskan, Cap Enyeart, won this distinct plaque. Maybe having an "NEA Man of the Year" at his side gave him the edge over the other state prexys. Whatever, a job was well done.

Local association outstanding President this year went to the president of ARTSD, Columbus, Ohio. Young Mr. Nice Guy, Bill Smith, CET. Probably the strongest local association in the country, ARTSD, but Bill Smith not only helped make them stronger, but also served as state CET chairman in Ohio and TSA Ohio did start rolling on the CET program because of it. Also Bill was State Treasurer. To top off his activities, he chairmaned the annual state convention, which was TSA's biggest ever.



Other awards this year were equally tough to decide on: NEA's Outstanding Officer award that went to Leon Howland; ESD's Outstanding Editor, that went to Roger Brehm; the "Outstanding Committee Chairman" that was won by the designer of "Serviceability Guidelines"; Lew Edwards, CET, of Trenton, N.J.

Sometimes awards seem like so much talk or so much words. But even the individual "FINCO" membership award is an example of extreme effort by an individual. Can you imagine the thinking, the action, and the follow through, not to mention the benefits to the trade, of Mr. Enos Rice's work in bringing in three dozen NEA members from Washington state?

The saddest part of the Awards and Recognition program to me, is that every deserving worker and all those outside the association movement can't be recognized. Just within CSEA and IESA I can think of a dozen men who really gave a lot of their talents and time for the overall betterment of this business. And outside NEA, I think of the good work of the Virginia association's fine worker, Bob Harrison, who received a "Special Recognition" award from NEA. From EIA, John Borlaug, Sylvania's national service manager, a "Special Recognition." And the Special Recognition award sent to the editor of Electronic Distributing and Marketing, Jim Kinkaid.

With the several dozen other awards presented at the convention, and with the many persons who weren't recognized it is somewhat frustrating that we can't really do a perfect job of recognition. But on the other hand, isn't it sort of a "Happiness is" condition where we do have a profession that does have that calibre of individual as we have named above . . . and who we have not named at all?

national...news & views



Principal Speakers of the first meeting of the ARIZONA STATE ELECTRONICS ASSOCIATION were (L to R) William J. Hayes, Assistant Chief of the California State Bureau of Electronic Repair Dealer Registration; Jim White, Manager of the BBB; Ralph Johonnot, Executive Vice-President of the California State Electronic Association.

ARIZONA DEALERS FORM NEW STATE ASSOCIATION IN WAKE OF EXPOSE'

The formation of the Arizona State Electronics Association was completed last month and incorporated under the laws of the state in much the same manner as the California State Electronics Association. The formation of the new group grew from the wake of a local newspaper expose' concerning television service fraud. The newspaper cited examples of what they considered fraud in specially rigged sets and the industry reacted in mass protest. With service calls averaging around \$3.50 each, dealers in Arizona asked Ralph Johonnot of CSEA and Jack Hayes of the BERDR to attend a special meeting in Phoenix. Over 300 dealers attended and heard Johonnot state that the average call in California was more like \$14.50 and that the people in Arizona were getting a real bargain instead of being gyped. The end result was the formation of a steering committee to set up a state association and a report back on August 12th. At that time a state convention was set for the 19th and the formal formation of ASEA was completed. The results of the election was the naming of Leonard Dean as President; Jack Kelly, V.P.; and Art Cunningham as Sec.-Treas. The original membership includes 49 and applications for another 38 are in processing. Every member is screened by a committee of members, with the help of the local BBB and distributors.



INDIANA SCHOOL BEGINS FIRST RADIO-TV SERVICE COURSE AT HIGH SCHOOL LEVEL

The first Indiana Junior-Senior High School Radio-TV Service Course will be offered this fall at Southeastern Indiana Regional Institute for Vocational Training. The

above sign indicates the course to be offered and invites students to schedule these classes. The NEA apprentice-ship committee will allow 1,000 hours credit towards the 8000 hour apprenticeship training program to become journeymen technicians to grads.

NEXT NEA BOARD MEETING TENTATIVELY SET FOR PHOENIX OCTOBER 25-26TH

The next quarterly board meeting of the National Electronic Associations has been tentatively set for October 25th and 26th in Phoenix, Arizona. Although we have received tentative approval to meet with the new Arizona State Electronic Association official word must wait until the group has finalized its incorporation and we have the official invitation to join with them. There will be more on this within the near future.



ST. LOUIS GROUP ADDS MORE C.E.T.'s

Robert Phillips (center standing) is shown here receiving his C.E.T. certificate from Missouri Certification Chairman Vincent Lutz. Other current C.E.T.'s in the picture include (standing left) Hank Nieuwendaal and seated (L to R) Bill Sackman, Walter Baese and Gene Kulangowski. Since this this photo was taken four more from this area have passed the C.E.T. test and will be given their certificates shortly. They include: Robert Hendley, Kenneth Turner, John Underwood and Bill Pennstrom. More tests are scheduled for later this fall.

EIA Issues New Booklet Called "Here's Something You Can Do About Tech. Shortage"

The Electronic Industries Association has just issued a new booklet titled, "Here's Something You Can Do About The Service Technician Shortage." The booklet is aimed at the current service industry and makes suggestions as to how programs for training can be set up, how to improve current material, etc. Copies can be obtained by writing EIA, 2001 Eye Street N.W., Washington, D.C. 20006.

NEA OFFERS C.E.T. BLAZER PATCHES, LAPEL PINS AND TIE BARS AT REASONABLE COST

C.E.T.'s may now order additional lapel pins for \$5.00 each, Blazer patches for \$1.00 each, Tie Bars for \$5.00 and a special white shirt I.D. tag that can be sewn on white shirts for \$1.00 each. Any of these can be ordered by writing: NEA, Director of Certification, 4622 East 10th St., Indianapolis, Indiana 46201. Only C.E.T.'s need order since all orders will be screened to make sure the person doing the ordering is a certified Electronic Technician.









Here are four more shots taken during the recent NEA convention in Waterbury, Conn. last month. In the upper left, Bill Woodbury, President of Sprague Products Co. asks the delegates to write him personally regarding any problems they might have in the industry. In a recent memo Bill stated that he hadn't heard from anyone so far so there must not be any industry problems. In the upper right is John Graham, the first living member of the Electronic Hall of Fame showing off his new plaque indicating his election. In the lower left is ESD Publisher Don Martin as he introduced Robert J. O'Neil of RCA Sales Corporation. Lysle Shanafelt, on the far left and Norris Brown look on. In the lower right is a shot of the big golf tournament winners with some of their prizes. There were more prizes than winners but it is always best to have something for everyone.

TEA CLINIC AND FAIR A MAJOR SUCCESS

The recent Texas Electronic Association's Clinic and Fair was a major success according to everyone who attended the program. All in all, 75 dealers paid \$25 to hear J. A. Ricard and were so impressed that many returned after the Friday Beach Party to hear him again. Over 100 technicians attended the day long alignment seminar and MATV session. Everyone was involved and excited about the educational efforts put on by TEA with the complete support of six major manufacturers and their representatives. 224 persons attended the Saturday banquet and to hear Newt Hielscher's humor. The Sunday "meet the retailer" sessions were also well attended. Truly one of the most outstanding business clinics for the television industry ever produced and our hats are off to J. W. Williams for his efforts on behalf of the TEA members.

FREE ESTIMATE

IF YOU TELL US WHICH PARTS YOU WANT REPLACED.

OTHERWISE WE MUST CHARGE FOR OUR TIME IN LOCATING YOUR TROUBLES.

Courtesy of O. W. DONALD CO., FORT SMITH, AREANSAS

Sometimes a simple sign tells the whole story. Thanks to O. W. Donald Co.

GE tubes are built to satisfy tough customers!



General Electric has an organization of real tough customers working to make sure every tube satisfies you and your customers - There's the materials jury that tests the parts tubes are made of to be sure you get the best tubes made \(\Boxed{1} \) the design chief who redesigns tubes for replacement use to do a better job for you

the quality control manager who tests tubes 14 different ways so you'll know every one will pass the test in your customer's set

the packaging engineer who demands 100% operation after rugged drop tests of packaged tubes
and the warehouse ramrod who gets all the tubes you need to your GE distributor when you need them. No wonder you can stake your reputation on dependable GE tubes the "service designed" line for all your replacement needs. Stock up today.

GENERAL 8 ELECTRIC



Reach for this when you ask, "What else needs fixing?"

CHECK POINTS FOR EVALUATING THE SERVICEABILITY OF TV RECEIVERS

A report from the NEA Serviceability Committee

The serviceability committee of NEA have just completed the following material to be used by service technicians in evaluating the serviceability of TV receivers. It is hoped that technicians will take the time, in the near future, to use this check list on certain sets they feel needs improving and to submit their findings to NEA.

As these are received, they will be evaluated and full reports made to the manufacturer on that particular receiver. The results of this "in depth" evaluation should make it possible for the service industry to reasonably and logically present information of true value to the manufacturer as an aid to him in the development of his products.

If you wish, you may tear out these pages of ESD and use them as your initial evaluation sheet. When this is sent into NEA's national office at 7046 Doris Drive in Indianapolis, Indiana 46224 a new one will be issued.

I. FIELD SERVICE (Service normally done in home)

A. BACK REMOVAL AND RE-INSTALLATION

- 1. Is more than one tool required?
- 2. Are there an excessive number of fastening devices?
- 3. Is means provided to prevent back from dropping down when fasteners are released or removed?
- 4. Does interlock mate readily and back easily line up for replacement?
 - 5. Are antenna terminals separate from back?
- B. PRODUCT IDENTIFICATION
- 1. Is model number readily visible without removing back?
- 2. Is serial number readily visible without removing back?
- 3. Are chassis numbers and subassembly numbers easily located and viewable without further disassembly, when back is removed?
- 4. On "private label" or "of brand" receivers, is "EIA" identification number or manufacturer's name, stamped on chassis?

C. SERVICE CONTROL ACCESSABILITY AND IDENTIFICATION

1. Are service controls accessable through back, identi-

fied on back, and also identified on chassis when back is removed?

- 2. Are concealed service controls, accessable from other areas, identified, and means of access and location obvious to a technically qualified person?
- 3. If locations are not obvious, is information provided as to location(s) and means of access? Preferrably on or near layout label.
 - 4. Are unusual tools needed for making adjustments?
- 5. Is high voltage adjustment (if one is used) concealed from customer, identified, and proper voltage prominently marked on chassis or high voltage compartment?
- 6. Are Dynamic convergence controls identified as to function, and/or areas of screen affected?

D. ACCESSABILITY FOR SERVICE, AND COMPONENT IDENTIFICATION

- 1. Are all tubes readily accessable and readily removed?
- Are tubes properly identified on layout chart without resorting to intermediate "V" numbers?
- 3. Are tube "keyways" (or blank pins) marked on layout chart?
- 4. Is high voltage compartment easily opened and free from dangerous sharp edges, etc., with sufficient clearance for technician's hand?
 - 5. Do transistors plug in?
- 6. Are transistors properly identified on chart with function, and "industry" or replacement part number?
- 7. If transistors plug in, are elements indicated on chassis or chart?
- 8. Are **all** adjustments, ordinarily expected to be adjusted in the field, accessable and identified on chassis or layout chart? including:
 - A. Sound demodulator.
 - B. Sound "IF."
 - C. Color sync.
 - D. Color phase (hue or tint range)
 - E. Demodulator phase (if adjustable)
 - F. Horizontal Efficiency (if used)

SEPTEMBER, 1969 13

- G. Pincushion phase.
- H. RF oscillator adjustments.
- I. AFC (tuner) discriminator.
- J. Horiz. stabilizing coil.
- K. All other field type adjustments not previously Mentioned.
- Are provisions made for and readily accessable to measure horizontal output and regulator currents without soldering?
- 10. Is turner accessable and/or readily removed for cleaning and inspection without disturbing other assemblies or components?
- 11. Are test points used in making adjustments, identified **functionally**, and accessable?
- 12. Are pilot lamps standard types, accessable and readily replaced?
- 13. Are all fuzes, circuit breakers, and other protective devices in easily accessable, obvious locations and locations identified on layout chart?
- A. Are such devices marked, or otherwise identified as to rating?
- B. Are such "one time" devices accessable for replacement without removing the chassis or bottom panel (if present)?
- 14. Are power supply rectifiers accessable for testing and/or replacement?
- A. Are voltage and current ratings of such rectifiers, indicated on component or layout chart?
- B. Is location of such rectifiers obvious or indicated on layout chart?
- 15. Are solid state amplifying or signal processing devices accessable for testing and/or replacement?
- A. Are locations, functions, and type identification (or replacement part numbers) indicated on layout chart?
 - B. Are sockets used, enabling analysis by substitution?
- 16. Are AC switches (singly or in combination with controls) accessable for replacement with minor disassembly only?
- 17. Are speakers accessable and easily removed and replaced without chassis or subassembly removal?
- 18. Is under side of chassis accessable for "in cabinet" trouble shooting?
- E. CHASSIS AND SUBASSEMBLY REMOVAL AND HANDLING (for shop repair)
- 1. Are minimum numbers of fastening devices used to mount chassis and subassemblies to cabinet?
- 2. Is more than one size tool required to remove chassis & subassemblies?
- 3. Are there "trick" or unusual means of securing panels, covers, escutcheons, etc., which must be removed or released to remove or reinstall a chassis or subassemblies?
- A. Are such means indicated and/or explained on label in cabinet?
 - 4. Do subassemblies disconnect?
- Are disconnects unusual? Are they prominently identified and/or coded?
- 6. Is there **identified** "parking space" on chassis for each subassembly? (especially those wired solid).
- 7. Can chassis and subassemblies be transported without danger of damage to components?

- 8. Are dangerous sharp edges present on chassis . . . where it would be held when carrying it?
- 9. Does cabinet remain safely balanced, after chassis is removed?

II. BENCH SERVICING

A. PREPARATION FOR SERVICE

- 1. Can chassis be placed in position for complete accessability (top, bottom, front and back) on a flat work table without using accessories or props? (and be stable in this position).
 - 2. Is there danger of damage to anything in this position?
- 3. If subassemblies are "parked" on chassis, do they affect stability or interfere with access to chassis?
- 4. Can chassis be made operational with subassemblies "parked"?
- 5. If provision is not made for "parking" subassemblies, can they be placed in safe positions not interfering with service procedures? (preferrably lying on bench)

B. PERFORMANCE OF SERVICE

- 1. Can all controls be operated safely when in servicing position?
 - 2. Are all adjustments accessable in servicing position?
- 3. Are all alignment test points, and servicing test points, freely accessable in servicing position?
- 4. Are all components accessable and replaceable without the need to remove additional components . . . other than shields?
- 5. Are resistors concealed within shield cans of coils or adjacent to coils that could be damaged if resistor overheats?
- 6. Does "shielding" interfere excessively, with service procedures?
 - 7. Are adequate test points provided? including:
 - A. IF agc.
 - B. RF agc.
 - C. Video detector.
 - D. Horizontal AFC.
 - E. Shorting points, for Horiz. stabilizing coil.
- F. Shorting point to disable control voltage to color AFC. (if used)
 - G. Tuner AFC.
 - H. Color demodulator and/or CRT color input(s).
- I. Any and all other test points required to perform any and all servicing operations or tests, as specified in service literature.
- 8. Are the above described test points readily apparent, easily located and adequately identified?
- 9. Are pin numbers (for tube sockets and other components with terminal pin numbers) easy to locate and identify, from bottom of chassis?
- 10. Are "E, B & C" terminals **clearly** identified on transistor connections, on "PC" boards?
- 11. Are controls, mounted within "PC" boards, identified as to function?
- 12. Are all components **clearly** identified on "PC" boards?
- 13. Is wiring pattern clearly indicated on **component** side of board?
 - 14. Are "PC" boards translucent?



ELECTRONIC service dealer

CALIFORNIA SECTION

CSEA president's report

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RALPH JOHONNOT, C.E.T. Executive Vice President 13666 S. Hawthorne Blvd. Hawthorne, California 90250 (213) 644-4636 By VIRGIL GAITHER



The Consumer Re-discovered

Hail the lowly consumer! Ours is a country of fads. We seem to have an insatiable appetite to move from "the thing" of the moment on to something else. Earl Lifshey in a recent issue of Home Furnishing Daily quotes from a book published in Medieval Europe on Protecting The Consumer. So what else is new?

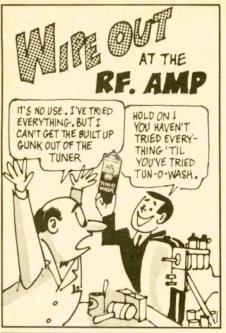
Our wise and astute government leaders at both the state and national level have discovered the vote getting potential and the publicity value of the fad. An event occured recently which points this out quite clearly. A routine radiation expose appeared in the New York press. Two congressmen from the area arose in righteous wrath "to protect the consumer." The resultant headlines and publicity they received was beautiful.

Add to this the bleat and cries of the self-appointed knights in shining armor who have made the fad a personal vendetta against all business. In the Los Angeles area, and I am sure there are other places throughout the rest of the state and nation, we have our little crusaders appearing several times daily in the local news stations and other media. Profit has become a dirty word to these people. All businessmen are suspect. Their accusations are pointed and not the least subtle. Their forte is the half-truth type of reporting.

Virginia Knauer, recent appointee to the Consumer Advisory Post is realigning her office force for an all-out drive. Testimony given in April and just released from the House Appropriations subcommittee discloses that even when she first took office, the consumer chief planned to zero in on the household appliance industry, particularly in its implementation of the recommendations made by the Task Force on Warranties and Service. Mrs. Knauer is "tough" as her own aides describe her. She claims she is for voluntary compliance, but will not hesitate to advocate legislative remedies. Clearly . . . time is running out on business.

This constant harrassment of the free enterprise system is taking its toll. Repressive legislation and regulations have been the results and the end is not in sight.

The American system of free enter-









prise is the greatest system ever devised by man. It has made America the most progressive nation in any field you can name. It has brought our people affluence beyond the wildest dreams of most other countries.

Because of the sins of a few within the business community this beautiful dream called American free enterprise is slowly being eroded away. Think not? Ask some of your other business friends. See how unsure they are about their own business future. Take note of their frustrations.

What can we do as an individual? What can we do as an association? Individually you can buttonhole your representatives, both state and federal, tell them your side of the story.

Several of them were businessmen themselves at one time. A letter to the same people at the appropriate time is still a very potent instrument. Each letter received has a multiplication factor, so your letter may represent 100's.

As an association we have done very little on the national level. In fact we have let other associations and other individuals carry the fight for us. Where were we when the Regulation Z hearings were being held? Other associations were there. Was CSEA? Was NEA? Will we be there when other legislation which is vital to our businesses is being considered? . . . I think we should.

CSEA COMMITTEE ANNOUNCEMENTS

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CSEA news wire



RALPH JOHONNOT, C.E.T., CSEA Executive V.P.

CSEA Announces Seminar Dates

The California State Electronics Association announces the fall and winter Management Training and Development Seminar dates and locations throughout California. Two Seminars are scheduled for this year; one, TV Management, the second, TV Sales and Service.

LOCATION	TV MANAGEMENT DATES	TV SALES & SERVICE DATES	
Sacramento	Sept. 8, 9, 10	Jan. 15, 16	
Oakland	Sept. 22, 23, 24	Jan. 26, 27	
San Jose	Sept. 29, 30, Oct. 1	Jan. 29, 30	
Los Angeles	Oct. 6, 7, 8	Feb. 2, 3	
Burbank	Oct. 13, 14, 15	Feb. 5, 6	
San Diego	Oct. 20, 21, 22	April 2, 3	
Santa Barbara	Oct. 27, 28, 29	Feb. 9, 10	
Orange County	Nov. 3, 4, 5	Feb. 23, 24	
Pomona	Nov. 10, 11, 12	Feb. 26, 27	

The fee for the TV Management Seminar is \$50 while the fee for the TV Sales & Service Course is \$40. Non-members may register for an additional fee of \$25 for each course. However, if a non-member applies for membership into the Association and pays his quarterly dues, he can register for these courses by paying the fee as a member said Ralph H. Johonnot, Exec. V.P. of CSEA. Each Seminar

TAX, INSURANCE &

INVESTMENT

TIPS

BY

RYAN



ROBERT J. RYAN

"Every person holds within himself a core of fear . . . a fear of becoming senile or becoming useless and economically helpless."

Death comes like a thief in the night and steals one of the finest technicians in the business.

Disability, equally ruthless, commits a hardworking, hard driving TV store owner to 30 months of convalescence in the back bedroom of his home.

Death is a cheat. So is disability. Old age can be a curse.

Only one thing can relieve the problems and pain caused by these disasters — MONEY!!!

And it doesn't matter where this money comes from - your business - your investments - yes, even your insurance.

Not too long ago, insurance was the great solution to every economic problem. Today this isn't so. For one thing, we can all 'grow' money faster in other investments.

Insurance buys you TIME - that is it's main virtue.

If you were sure you were going to live long enough to fulfill all your plans and dreams — the problems would disappear overnight.

Mr. T.V. Man, did you ever meet a persistent salesman who just wouldn't be denied an interview? We at the Ryan Company have three competitors who fall into that category. Their names are Death, Disability, and Old Age. As your insurance and investments consultants, our job is to make sure your family and insurance and investments consultants, our job is to make sure your family and your interests are protected before our competitors have a chance to insist on an interview with you.

We can't show you how to make money in your business — you're doing a good job of that right now. We can show you how to keep some of that money — and make it grow. And we can provide you with the income you or your loved ones might need in an emergency.

Remember, it is never a "convenient" time to take care of these concerns.

Robert J. Ryan Company

422 South Western Avenue Los Angeles, California 90005

386-8651

enrollment is limited to 25 participants. These Seminars will be conducted by A. R. Lawrence of A. R. Lawrence and Associates, Training Consultants. The closing registration date is two weeks prior to the date of the Seminar. For further information, contact CSEA state office, P. O. Box 202, Hawthorne, California 90250 or phone 213-772-5028.

CET EXAM TIMES & PLACES

CET examinations for the North San Diego area will be given by Mr. Raymond Merrill, CET. For an appointment phone 727-0524.

CET examinations set for September 9 for Yuba City. The time, 7:30 p.m. at Yuba Music, 710 Plumas Street.

CET examinations in Los Angeles, Wednesday, August 27 at 7:30 p.m., 13666 So. Hawthorne Blvd., Suite 6 (upstairs).

LUCKY WINNERS

Mr. Richard Ross, technician for Day & Nite TV Service in Bellflower, was the winner of a Motorola Quasar television raffled off at the NEA convention in Waterbury, Connecticut. AND — Mr. Sherman Abbott of Abbott's TV & Radio in Ontario was the lucky person to win a Lincoln Continental Mark III, the grand prize from Sues, Young & Brown's 25th Anniversary Celebration and product showing.

SANTA MONICA

A newly elected group of officers of the Santa Monica Chapter of CSEA have started a massive membership drive for the Venice, Pacific Palisades, Santa Monica, Culver City area. Those elected for the balance of the 69-70 term are Charles Bergamo, president; Sam Simon, vice president; Mel Ginsburg, secretary; Mike Sherman, treasurer; and Harry Bernstein, delegate. For information regarding meeting dates of this chapter, call Mr. Bergamo at EX 5-6201.

PANASONIC PARTS

A newly formed parts division for Panasonic has been announced by Sol Fields, General Manager. This parts division covers the states of California, Oregon, Washington, Montana, Idaho, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico. The address is 2121 Yates Avenue, City of Commerce, California 90022, phone 213-723-6271. Mr. Nick Vukovic, Regional Manager.

SACRAMENTO

The "Alignment Club" of Sacramento held its first meeting in the month of August. Officers were elected and a simple set of by-laws established. Monthly meetings will be held on the second Thursday of each month at Rainbow TV, 2690 Northgate Blvd., in Sacramento at 7:30 p.m.

Any member or non-member of CSEA desiring to join this elite group is welcome. (Continued on Page 20)

CHANNEL MASTER

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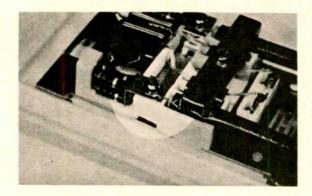
DALIS RADIO & TV SUPPLY

919 N. 7th St., Phoenix, Arizona

CHANNEL MASTER 82 CHANNEL VARIABLE ISOLATION WALL TAPOFFS

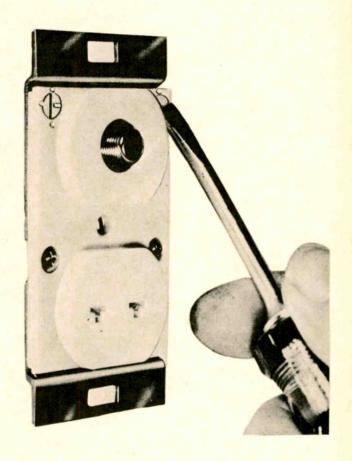
UHF/VHF

NOW - select isolation values with the turn of a screwdriver



All models feature a new method of rapid trunk connection that provides positive electrical and mechanical connections plus easy visual inspection.

New speed, convenience, and isolation value accuracy

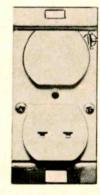


TAPS ARE DESIGNED FOR 82 CHANNEL UHF/VHF/FM USE



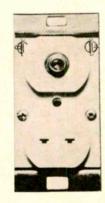
Model 7313

75 ohm to 75 ohm Includes "F" Connector and Mounting Screws



Model 7314

75 ohm to 300 ohm Includes Twin Lead Plug-in Adapter and Mounting Screws



Model 7315

75 ohm to 75/300 ohm Includes "F" Connector, Twin-Lead Plug-in Adapter and Mounting Screws



0 DB WALL TAPOFFS

Same finish and quality construction as variable tapoffs in two models.

Model 7311, 75 ohm to 300 ohm. Includes twin lead plug and mounting screws.

Model 7312 (Illustrated), 75 ohm to 75 ohm. Includes "F" connector and mounting screws.



Plug-in 300 ohm twin lead adapter grips transmission line with positive connection. No stripping required.

CSEA NEWS WIRE Continued

REGULATION Z

Our state office has been swamped with inquiries regarding the new federal regulation. Because so many of our members asked the same questions and I could not answer, I contacted our association attorney, Mr. C. C. Montgomery. Here is his reply:

"Your question is what if anything can the seller do to protect himself where he sells a TV set and contemporaneously also sells an aerial which has to be installed?

Your secondary question is: Can we prepare some sort of form whereby the buyer waives his rights under the Regulation? The answer to the second question is the simplest and therefore I give it first and state quite categorically that the buyer is precluded from waiving his rights under the regulations.

The seller, however, is not without any protection. He can do any of three things: a) he can sell the TV instrument by a contract separate from the aerial installation contract and run thereby the risk only of cancellation of the aerial contract; or b) he can insist that the installation of the aerial be for cash and leave only the TV instrument covered by the Security Agreement; or 3) he can refuse to install the aerial for three days plus mailing time after the signing of the Security Agreement for the sale of the TV and installation of the aerial.

My imagination does not conjure up any other manner whereby the seller can protect himself.

In dealing with your members, you should be careful not to put your-self in the position of practicing law. Any publicity given to this opinion of mine should be accompanied by a warning that you are not giving legal advice and that in each case the member must consult his own attorney who may or may not agree with what I have to say."

Also included in the requirements of Regulation Z it is stated that you must bill your customers monthly. Interest, late charges, etc., must be disclosed. Monthly and without fail you must bill showing the amount owed, amount paid on account, and

the balance. Through Redi-Form we have available several types of imprinted statements at group rates. If you need statements and envelopes, write our office for details.

Promotional Material

Two ideas have come across my desk to promote both CSEA and your firm. The first, matches - How much greater coverage can you get at a low, low cost per person? Matches will be available if we can get orders totaling 280 thousand match books. Needed would be 56 firms ordering 2 cases (5,000 match books). They will be in three colors, our emblem as one side of the folder and the dealer imprint on the other. The cost is \$12.96 per thousand imprinted and delivered to your store, a total investment of \$64.80. Prices drop still lower at 3, 4, 5, 6 and 12 cases.

The second idea, playing cards. For the welcome wagon, preferred customers, and sales closes. These are plastic-coated, gambler's quality, gold and blue with the CSEA bug and the dealer's name imprinted on each card. Minimum order 50 decks at \$1.17 per deck. Prices again go down at 100, 200, 750, or 1,000 decks. Special plastic or suede boxes imprinted are available at additional cost.

If you are interested in either of the above ideas, drop us a note.

Ametron To Offer Tech. Session on CATV Sept. 15

American Electronic Supply, Ametron, will hold a Blonder Tongue Technical Seminar session at 7:00 pm September 15th at their store located on Melrose in West Los Angeles. The program is designed to review all of the latest B-T master antenna television systems and to offer technical information on installation.

New Members

Eugene J. Orrico, Jr.
Whittier
Busch TV Service
Bakersfield
John's TV
Daly City
Seivane TV
Los Angeles

Alco Electronics Glendora Alosta TV Azusa United TV Glendora Barney's TV & Sound Sunland District TV Los Angeles Cedar Electronics Bloomington Jackson's Electronics Los Angeles Reynold's Radio & TV San Bernardino Acme & Wagoner Bros. San Bernardino Valley Radio & TV Hemet Kirby's TV Banning United TV Exchange Burbank Castro-Salas TV Los Angeles Car Radio Tape Center San Bruno Wilber G. Bowen Ontario Dan Galuszka Riverside Lewis R. Christy Rialto Whitten's TV Fresno Barnes Sound Co. San Bernardino Precision TV Fontana Mann & McGruder Inc. Los Angeles Jack La Costa TV San Diego City-Wide TV & Antenna San Diego Community TV Glendora Bill Gregory TV Loomis Swan's TV Morro Bay Don's Sight & Sound Center Escondido Herb's TV Solana Beach Alpine Radio & TV Yreka Santa Maria Appliance

Santa Maria

Hints For Better Use From

Your Test Equipment



By RON SIMON

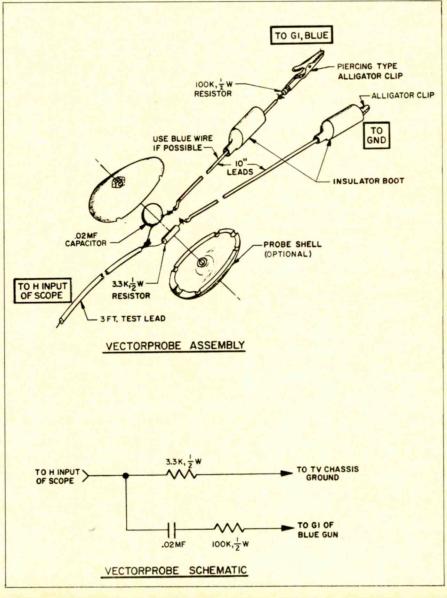
There has recently appeared on the market a variety of new test equipment. One of the most interesting lines is that offered by a Japanese firm, Leader Electronics Corp. We have had two of their color bar generators and a scope in our shop and find them useful and dependable. Our shop owns a number of color bar generators and these are always the first to be used. The most noticeable characteristic of the generators is the extreme stability of the pattern. I feel this is due to the completeness of the composite video signal which comes closest to a station signal of any generator I have seen. A convenient feature is the single dot or cross that is in the exact electrical center of the picture. A useful feature for static convergance and centering. Don't get caught using this on a set without centering controls where the customer can see or it may be embarassing. The one feature I found lacking was a sound carrier. This is of little importance in most uses but might be a problem if it is the only generator you own. The construction of the generator was on glass epoxy boards and resembled industrial equipment more than the service equipment usually available.

RCA recently printed the circuit for a vectorprobe that can be used with any scope, of reasonable quality, to view color vector patterns. It is simple to construct and use. Connect the probe from the blue gun of the CRT to the horizontal input to your scope and use the vertical input for the red gun. Adjust horizontal and

vertical size for a round pattern and use as you would any other vectorscope. (See Drawing)

Color test jigs are now a standard item. A simple way to improve their

usefulness is to add a bleeder resistor from the high voltage anode to ground. The resister used in high voltage probes is ideal for the purpose, any value from 500 Megs on up will work well without loading the circuit. A 50-UAmp meter in the ground return will give a continuous reading of the high voltage on any set connected to the jig. Six hundred megohms will give a full scale reading of thirty KV but you can use any resistor from a discarded probe and easily hand calibrate the meter at key points using a separate probe as a standard. You can use a commercial high voltage probe permanantly connected or buy a larger meter and place it in a convenient viewing position. With this set-up all sets will be checked for proper regulation and the operator will not have to be worried about the shock hazard of a possibly charged CRT.



SEPTEMBER, 1969 21



A dud in 500 million?

Now and then, our big competitors knock us—because they'd like to have our share of your business. But they can't knock our product.

Because Raytheon receiving tubes are universally regarded as the most reliable in the industry. Ever since we produced the first vacuum tube, we've made them to just one specification: the highest quality standards.

All of our tubes have to shape up—to pass rigid electrical and mechanical performance checks.

That's why you rarely find a "dud" among the more than 500 million Raytheon receiving tubes we've made. It's also why you get fewer call-backs...earn greater customer satisfaction with your work...while

making more profit per tube. And it's the reason why Raytheon is the leading independent tube manufacturer serving the independent service dealer today.

Like to know more? Ask your distributor why he gets fewer Raytheon returns than with any other brand...and about his latest deal for you.

Raytheon Company, Receiving Tube Operation, Fourth Avenue, Burlington, Massachusetts 01803.



Remember to ask
"WHAT ELSE NEEDS FIXING?"

CALIFORNIA NEWS NOTES

San Jose Dealer Loses Registration in BERDR Action

Leon Ray Cook, dba, Cook's TV, registration number 8780, 1636 Foxworthy, San Jose, California, had his registration permanently revoked effective June 8, 1969.

Cause for disciplinary action against Mr. Cook's registration was fraud and dishonest dealing and gross negligence. Evidence gathered in this case was obtained by running state-owned sets through Mr. Cook's repair facilities. Mr. Cook was advertising low priced house calls; however, on two occasions he replaced three tubes and spray cleaned the tuners unnecessarily at an extra charge for labor. In both cases the replacement of one single tube would have returned the sets to normal operation. Also Mr. Cook charged for repairing the sets when in fact he did not. In both cases he failed to find the defective tube that was causing the malfunction in the state-owned television sets.

Criminal action against Mr. Cook for misleading advertising was dismissed by the District Attorney's Office subsequent to the revocation of his registration by the State Hearing Officer.



NEA PRESIDENT EMMETT MEFFORD from Fontana, California (at mike) is shown here during the recent NEA convention in Waterbury. The occasion was the awarding of NEA's outstanding committee chairman award to Leon Howland of Indiana (standing) for his work on the C.E.T. program.



IOWA BEACON

A SPECIAL ESD FEATURE

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REX RAY, Vice President Washington

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KENNETH YOUNG, Washington

IOWA president's report



by CLARK POHL

This month's report will try to take on a new light and be of more meaning to our members by passing on information and happenings related to TSA, Iowa

Vice President, Rex Ray and President missed last Board meeting and it was carried on very capably by our Executive Secretary, Les Buchan and Secretary Harwell — main information being the progress of ISU's technical and management seminar (use and minutes). Jack Betz, Homer Davidson, E. E. Harwell, and Clark Pohl and their families attended the NEA convention in Waterbury in July. Reporting much progress being made at the National level. Members will receive full report by mail and much will be covered elsewhere in the ESD.

Howard Bonar and his advisory

committee to Area VI have this last month held several meetings hoping to benefit the college vocational electronics course.

A reminder; dropcloths, sacks, and all PR material are now available and should be ordered thru Les, TSA Iowa, Box 215, Waterloo, Iowa 50704.

August has been very busy as Helen and I attended the Texas clinic and convention at Galveston; stopping on the way to visit Norris Brown's and Fried Kries at Foleys in Houston. The Texans, as always, were most congenial and we enjoyed every minute. From there I attended the Narda Institute of Management in Washington, D. C. The interest in Associations was strong but most hadn't known about NEA and benefits that could be gained by becoming a member.

I would like to encourage all to participate in this monthly section of the ESD as a means of letting everyone around the state know your thoughts and ideas.

I haven't heard anything of our longtime member from Northwest Iowa, Bill Roggow, who had a serious heart attack in May. Bill, we'd like to hear how you are getting along. Another member had a misfortune last month — Ray Schooler while checking a freezer in his home basement was nearly electrocuted and partially paralyzed for awhile. We hope both are on their way to complete recovery.

On the brighter side, Ed Vilimek should be nearly moved into his new store. Ed has leased out two stores in his complex and apartments rented out above — Ed's getting ready for the day when somebody else will bring in the income for him. You can believe he's earned it. In case you didn't know, Ed not only runs a store and TV service, he also is an instructor at Drake University and on top of that Editor of our Iowa section of the ESD.

Anyone else doing anything? Let Ed or I know – it's news!!!!!

ISU Consumer Electronics Seminar Highly Successful

The two day Consumer Electronic Servicing . . . Today program, under the direction of Iowa State University was held last month and proved highly successful for all of those who took part.

The program got underway on August 19th with a technical session followed by several panel discussions. Jim Smith of Sencore talked about the reason for Scopes and Robin Morphew answered the question — Why the DC scope.

The afternoon session was broken down into three panel discussions titled: 1. Increased Scope Usage — Why? Points for increasing shop efficiency with multiple use of scopes and where to start increased scope usage this week.

The next day the group worked on Business Management with such topics as "Small Business Administration — Order of Business." Selling service/Managing service; Service Businesses for Iowa—Iowa State University Panel.

This was one of the most interesting panel sessions of the program since these people from ISU discussed such things as "How much is your time worth?, Raising the worth of your time and Measurements of increased time worth.

Major speaker for the two day event was John Krawczyk, National Service Manager for the Philco-Ford Corp. The topic he reviewed as "Money Making Points."

A special TSA Breakfast was held on the 20th and that afternoon the association sponsored the giving of C.E.T. tests.

MY SISTERS AND I

by Anne Association Notes by Jim Yordy

How often does a person get to see an autobiography in a trade magazine? Probably not too often, so you might fine my name and story quite interesting.

In the first place I don't know who my parents are. Being an orphan is quite lonely. It's even worse when you have at least three sisters that you hardly know. Just recently I learned their names, NEA, NATESA and NARDA. The more I learn about my sisters the more I wish we could be a family. It would make me most happy.

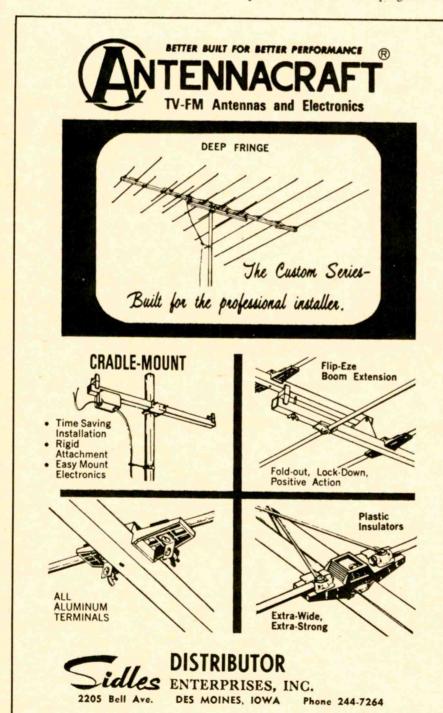
One of my older sisters for years failed to take into consideration that there was more than one phase to life and insisted on being independent to any other phases. Sad mistakes set her program back years because she failed to realize that things can and do need fixing once in a while.

Then my other older sister spent too much time bickering and arguing about small things and not nearly enough time actually managing her affiars. She did realize that things needed to be fixed though.

Then there is that younger sister. According to what I hear she is quite a goer. She, though of the younger generation, still maintains a bit of squabbling ability and at times is quite catty. I've heard that she and one of my older sisters just fight all of the time. Gee, I wish we could be a family and get along together.

According to my research of we Associations, there are none that are nearly as good as they should be because we all think we are right even when we are wrong. Dorothy Carnegie would more than likely be ashamed of us all.

I'm going to contact my sisters and see if somehow or another we can't get together and be one big happy Association family. If we did this, the name Association might amount to something.





KEA NOTES

A SPECIAL ESD FEATURE

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2ND VICE PRESIDENTS

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Bill Winegar

SECRETARY

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TREASURER

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SERGEANT-AT-ARMS

Keith Nicholson

NEA DIRECTOR

Kenneth Marcy

PAST PRESIDENT

Lloyd Milham

SECTION EDITOR

Lauren Matson

KEA President's Report



By EMMETT HUGHES

NEA's 5th annual convention was held the last of July, in Waterbury, Conn. and I, with my family, was fortunate in being able to attend. The first part of the week was devoted to special events, a stage show "Hello Sucker" with Martha Rave, a tour to New York, we visited the United Nations and also the Statue of Liberty. We also had a Golf tournament and Clam Bake everyone seemed to enjoy very much. Friday and Saturday Panels' were held and those that I attended were very interesting. The business meeting started Saturday and ended Sunday afternoon. There were several decisions made and I think that all were made in the best interest of the entire membership. Be sure and read the minutes of the meeting that you will receive. I personally want to thank all the Manufacturers and Distributors who were represented at our convention and our appreciation goes to them for their part in making this convention the success that it was.

Having attended the past four NEA conventions I benefited from each one of them. Our National association is made up of State associations, which is made up of Local associations and individual members who actually run the National Association. I think now is the time to make your plans to attend the 1970 NEA Convention which will be held in St. Louis, Missouri. This will give you an opportunity to voice your own opinions and cast your own vote on any decisions that are made. Also you will see just how our National Association is working and growing. Let's plan to represent Kansas in a big way in 1970.

Let's get busy in Kansas this next year and increase our membership and also our CET's. There are many benefits which can be obtained from our National Association.



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WINEGARD

KEA Guest Editorial

By KENNETH MARCY



As I think about a subject to write on I always come up with Associations as the number one item facing the independent serviceman today.

I have been in business in the same city for almost 40 years and in the early days of radio, long before television, I helped organize what I believe was the first Association in the State of Kansas. (Old timers may correct me on this) -The name "Radio Service Dealer Assoc. R.S.D.A. with the picture of an old style receiver tube as an emblem. I remember one convention that we had. It was held in the city park of Great Bend, Kansas, almost in the center of the state. It was just a family picnic type of meeting with wives and children in attendance, maybe a dozen members, but it was a beginning. Now we have state associations all over the United States and now a National that is going places -NEA- National Electronics Associations, not association. Please note that the wording is "associations" which means state groups. Let's print Article II and Article III of the National Constitution so as to refresh your memories of what the founders of National Electronics Associations had in mind.

ARTICLE II - PURPOSE

This Association shall be a non-profit organization whose purpose it shall be:

- A. To promote the interests of the Electronic Service Industry.
 - B. To foster the business interest of it's members.
- C. To act in the interest of public welfare by assisting the State Associations in establishing, adopting and maintaining uniform rules and regulations governing the customs and commercial usages of the Electronic Service Industry.



- D. To acquire, preserve and disseminate business and service information.
- E. To promote legislation favorable to the Electronic Service Industry and in the Public interests.

ARTICLE III - ORGANIZATION

Section 1. The National Electronic Associations, Inc., shall be an affiliation of organized State Associations of the United States of America.

Section 2. The National Electronic Associations, Inc., shall not in any way interfere in the internal affairs of a member State Association.

Section 3. There shall be no discrimination because of race, creed, color or sex.

The founders, officers, and organization of NEA believe that this purpose and this method of organization is what the service technician and the sales/service dealers around the nation want for their national organizations. An organization made up of state associations and guided by these state associations. Primarily interested in promoting the service industry, but at no time disregarding the sales end of the business on which a great portion of it's members are naturally engaged.

Believing in the idea that independent business, it's place in the community, and in the industry, is something healthy for the country and beneficial to the customer.

Knowing that to retain this segment of the business, that the thousands of small dealers must remain as our friend, M. L. Finneburgh, Sr., has said many times — Eternally Vigilant. (Incidentally I was very pleased to see this man's picture on the front cover of our National magazine as I believe M. L. Finneburgh has done more to wake up the independent serviceman to the need of Association membership than any other man.)

There is work to be done in strengthening our associations on all three levels, nationally, statewide and locally, and this we have begun.

There is work to be done in informing the public, other industry groups, and our own associations, so that we all better know where the boundries are, what the law is, and what we are locally, statewide, and nationally. This is being done.

YOU, the local and state members, I, and this idea are NEA.



Pictures are from local KEA meeting in Hutchinson, Kansas. Mr. Bob Coslett, the distributor's representative for Motorola gave a 2-hours seminar on the Quasar chassis and how to trouble shoot it.



WICHITA

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the KETA news

Kentucky Electronic Technicians Association

Kentucky Electronic Technicans Association

FRED B. WATJEN Louisville, Kentucky

CHARLES W. CAVE Ferncreek, Kentucky First District Vice President

DONALD L. STANSBURY Frankfort, Kentucky Second District Vice President

ROBERT CHILDERS Elizabethtown, Kentucky Third District Vice President

RAY DEMONBRUN Louisville, Kentucky Treasurer

ROY BAILEY Louisville, Kentucky Recording Secretary

ED KIMMEL Louisville, Kentucky Corresponding Secretary

FRANK WILDER Louisville, Kentucky Sergeant-at-Arms

The day the world stood still! The day the men of planet Earth put their feet down on the moon and most of the public did not realize what great strides of advancement had been made in the electronic world of today. Some twenty-five years ago we learned that we could bounce a radar beam off the moon to measure exact distance but few of us at that time ever thought we would have been walking on the moon in this short number of

president's report



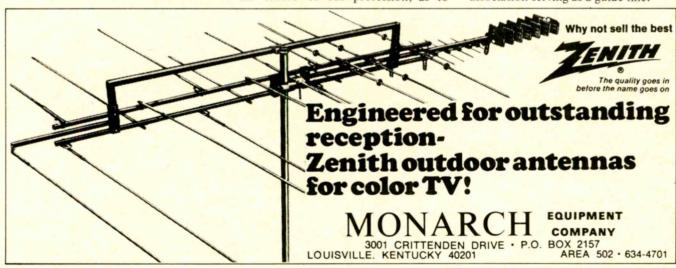
By FRED B. WATJEN, CET

vears.

Most of us have grown up with the radio industry and have naturally gone into the television industry and have seen it become the third greatest money maker and the fastest changing business this country has ever seen. You may ask what the association can do for you. I find that public relations. our educational and training programs have helped every service dealer to improve his income and with the insurance program setup a brighter future for them is assured. Any group that can help to improve the overall picture for the individual serviceman is an asset to his profession and community.

The association with all its potential powers can be a mighty influence on the future of our profession, as to

whether it improves its affluence and thereby improve the professional standing of each member, or if not used as a catalyst to get things going and guide them in their orbit could be detrimental. More changes are bound to emerge as new techniques and new products are developed. The CET program has been a wonderful shot in the arm in the start of developing a licensing program for service technicians. A program is desperately needed to get this fairly new profession the recognition it needs as a qualified profession with registered licensing, and promote higher ethics and better understanding with the public. This can only be accomplished thru great numbers and the national association serving as a guide line.



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PROGRAM PROGRESS REPORTED BY CAVE

Much interest and enthusiasm is being generated in many quarters at this time in our apprenticeship and training program. We have had many inquiries from varied parts of the country, Vocational Schools (both high school and college level), Technical Schools, Jr. and Sr. Colleges, and individuals (one from a state prison).

California has reported two TAC apprenticeship programs, Nebraska, Iowa, Oregon, Missouri and Kentucky. Indiana is to start a high school and post high school apprenticeship training course this fall following the guidelines of our Louisville, Kentucky plan. Kentucky now has 16 indentured apprentice and through the efforts of our state office of U. S. Dept. of Labor – Bureau of Apprenticeship and Training, the Louisville Electronics Technicians Association (LETA) has been given draft exempt status to all indentured apprentice until they become journeymen.

If you have an apprenticeship program in your state and I do not know about it, would you please contact me about it as soon as possible.

Please send me all information about up-grading programs carried on in your state. Kentucky has reported 96 technicians enrolled in solid-state circuitry and practical application up-grade classes.

NEA is going to give high priority to apprenticeship training this year, and with every member doing his part, this can be a year of growth for all involved.

Information should be sent to me, Charles Cave, CET 7902 Bardstown Rd., Louisville, Kentucky 40291.



FRED WATJEN, KEA PRESIDENT is shown here as he M.C.'d one of the major dinner meetings during the recent NEA Convention in Waterbury, Conn. To Fred's immediate right is his lovely wife followed by M. L. Finneburg, Sr. and his wife.

NEA SURVEY REPORTS AVERAGE TIME AND RATE SCHEDULES

Note: The questionaire sent out to all NEA members had a reply of 21% and returns from 23 states. The results are a complete average of all returns.

Number of Service Only Companys	25%
Number of Sales & Service Companys	75%
Returns from rural area	32%
Returns from metro area	
Average age of Dealer owner	45.6
Average age of Technician	
Number of technicians per shop	
Years of experience per shop	
Average time on B&W Service Call	
Average time on Color Service Call	42.1 Min.
Average time on Color shop repair	2.3 Hour
Time to pull & install Color chassis & all adj.	59.8 Min.
Average Color Service Call Price	
Average B&W Service Call Price	
Average Stereo Service Call Price	
Average Color shop repair price	
Productive hourly rate	10.26
	2000
Number that sell Service Contracts	
Number that do NOT sell Service Contracts.	
Average price of Service Contracts (2nd year)	99.24
Service Call warranty in days	44
Shop repair warranty in days	
Number that warranty complete set	
Number that have limited warranty	
Number of Companys that do Dealer work.	
runioer of Companys that do Dealer work.	71/0
Percent of net profit before	21.1%
Hourly rate of pay for journeyman technicia	in 3.72

PRIORITY RATING BY MEMBERSHIP

- 1. Certification
- 2. Technical Tips
- 3. Public Relations
- 4. Technical Information
- 5. Apprenticeship
- 6. Serviceability
- 7. Licensing
- 8. Insurance
- 9. Hall of Fame

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...there's a Sylvania Entertainment Instrument to thrill any graduate. Choose a stereo, television, radio or tape recorder. They'll enjoy and remember it for years.





Sylvania's 102 square inch screen personal portable color TV. Has convenient carrying handle and built-in VHF and UHF antennas. AFC (automatic fine tuning) insures a perfect picture with the push of a button. Sylvania portable color television Ask for model CB35.



Sylvania's mini-mod. The choice of the young and young at heart everywhere. This 3-speed stereo record player comes complete with a pair of detached speakers. Sylvania portable stereo starts at \$99.95. Ask for model MM110. Complete with dust cover, just \$109.95

> New from Sylvania. A smartly styled, full function cassette tape recorder model CT110. Plays anywhere. In the house on regular house current. Outdoors on 4 "C" cell batteries. Complete with





Your headquarters for Superb Sylvania home instruments

Sylvania's big 19" diagonally measured screen black and white portable TV model MY74. Offers a big picture in a convenient, portable package. Lets them take it where they go. Sylvania black and while portable television starts at entertainment \$129.95. Ask for model MY74, just

\$149.95

Sylvania distributor Cooper Louisville Co.

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THE Magnavox COMPANY

FORT WAYNE, INDIANA 46803

Electronic "Hall of Fame" Contribution Program Organized

The "Electronic Hall of Fame" has been incorporated in the state of Nebraska and is taking on a new look in fulfilling the needs and desires of the Electronic Industry.

The National Electronic Associations (NEA) has agreed to represent the service division and has appointed their Regional Vice Presidents as directors of this segment. It is hoped that all other organized trade associations within the industry will follow this example and form their own selection committees to the "Hall of Fame." NEA has provided the first major step by incorporating it as an individual corporation and it is now possible for any recognized group to take advantage of this organizational effort. It is hoped that the Broadcasters, Manufacturers, Parts Distributors, Product Distributors, etc. will all want to be a part of the "Hall" project.

Until such time that the "Hall" can generate its own financing, the directors of the service division are asking for contributions to the project. All donations will be received and recorded in the permanent record book.

As of this date the following have contributed. This list will be maintained in ESD and as each donation comes in the donor's name will be added to the "Hall of Fame" Patron's

National Electronic Association Forrest Belt & Associates Richard Glass, CET Charles "Cap" Enyeart, CET Nebraska Electronic Association Roger Brehm, CET TSA Youngstown, Ohio

Contributions should be sent to Electronic Hall of Fame, c/o Charles Enyeart, 924 No. 44th Street, Lincoln, Nebraska.

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COLOR TV REPAIR SHOP FOR SALE Completely set up for color & B&W - Only fully equipped shop in town of approx. 25,000 Air Conditioned. Reasonable rent and located excellently in center of town. Write Box 522, Artesia, California 90701.

Excellent reputation established TV sales & service business for sale. Fully equipped; Walk in and take over. Complete price \$7500.00. Please write P.O. Box 4281 No. Hollywood, Calif. or call 762-6793.

Thousands of obsolete, semi-obsolete and current tubes - 1 to 25 - 75% off list. Over 25 - 80% off.

1/8 AMP. FUSES 10¢ EACH. ALL OTHER FUSES 60% OFF LIST.

590 Sam's Manuals complete with cabinets. From No. 119 to 846. Some missing but over 590 intact.

- 3 Scopes, Heathkit, RCA & Jackson
- 2 Field Strength Meters
- 4 Tube Testers
- 2 Color Bar Generators

OHMMETERS AND OTHER USED EQUIPMENT. WHAT DO YOU NEED?

1/2 WATT RESISTORS 8¢ EACH

- 1 WATT RESISTORS 12¢ EACH
- 2 WATT RESISTORS 16¢ EACH

Other items priced accordingly, 25% with order. Balance C.O.D. Closing out your shop? We buy - sell - trade. A&A Electronics, 1521 Blackstone Fresno, Calif 93703, phone 485-5862.

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Buy and sell quality Philco parts and accessories—get free shoes for your family! \$150 in purchases*...earn a certificate for one pair of famous Hush Puppies® Casual Shoes.

Get your order in fast—offer good until September 30, 1969.

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Casual slip-on with chain accented front the ladies will love. Squared toe, little heel and soft sole are additional feminine touches. In light or dark brown.



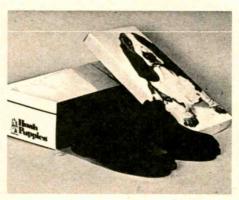
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TONY for Men and Boys

The smart slip-on in Breathin' Brushed Pigskin®. A light footed natural for casual suits and sports coats alike. In light brown or charcoal grey.



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Philco Indoor Antennas
and Auto Antennas
Rear Seat Speaker Kits
Philco Refrigerator and
Furniture Polish
Surface Units, Inlet
Hose, Solenoids
Laundry Pump Kits
Dishwasher Impellers
Drain Hoses

Dryer Heaters
Belts
Screens
Bearings
Fan Motors
Speakers
Private Listening Units
Intercoms
Cartridges—Adapters
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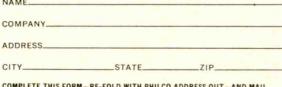
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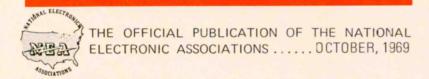
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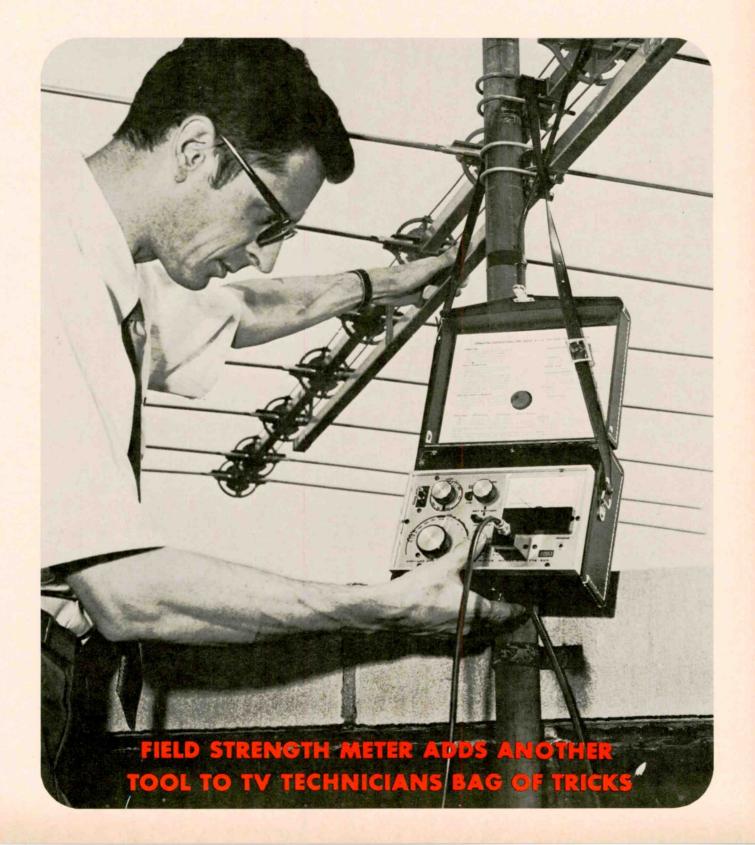
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Outdoor Type for Fringe and Weak-Signal Areas

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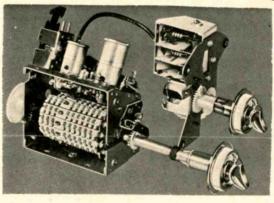
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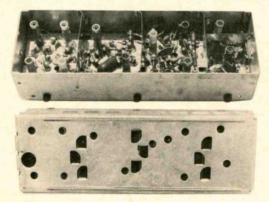
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ELECTRONIC service dealer

THE OFFICIAL PUBLICATION OF THE NATIONAL ELECTRONIC ASSOCIATIONS......OCTOBER, 1969

EDITORIAL CONSULTANTS

SAM SPINO, Editor of TELSA NEWS of Connecticut; D. C. BROWN, HOOSIER TEST PROBE; PETE FABBRI, Editor of the TSA NEWS of Michigan; JOHN P. GRAHAM, Editor of the ARTSD NEWS of Columbus, Ohio; ROGER BREHM, Editor of the NESA of Nebraska; J. W. WILLIAMS, Editor of the TEA TIMES of Texas; OHIO SECTION; LAUREN MATSON, KANSAS SECTION; ED VILIMEK, IOWA SECTION; WARREN BAKER, TSA NEWSLETTER.

ADVERTISING OFFICES

Electronic Service Dealer 13543 So. Hawthorne Blvd. Hawthorne, California 90250 (213) 675-8070

EDITORIAL DEADLINES

All regional section editorial material must be in the hands of the regional editors on or before the 15th of the month proceeding publication. Advertising in these sections have a similar deadline.

All editorial material must be in the hands of the Publisher no later than the 20th of the month proceeding publication. Any material received after deadlines will be held for future issues unless space permits its use in current issue.

ADVERTISING INFORMATION

Complete advertising rates, mechanical-requirements and circulation information can be obtained by writing the publication offices. Special insert rates and use of publication mailing list for direct mail advertising information can also be obtained by writing the publication offices.

ELECTRONIC SERVICE DEALER, the Business Journal for the Professional Electronic Dealer, is published monthly by Associated Publications, 13543 So. Hawthorne Blvd., Hawthorne, California 90250. Subscription rate is \$5 per year or \$7.50 for two years. The publication is entered as Controlled Circulation postage paid at Los Angeles, California.

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letters

Two months ago we wrote an editorial on pulling chassis and received numerous letters from all over the United States. The editorial was badly written and did imply many things. Our only point was to suggest that SOME dealers might be costing themselves money by pulling chassis into the shop. However, the following

letter from J. W. Williams of Texas pretty well sums up the message.

Dear Don:

In your editorial of August (ESD), I think you told us more than you know about TV service pricing. With most of your editorials, I agree, but not with

this one. Most

Most dealers are smart enough to know that they can make more money on calls completed in the home than they can on shop jobs. You build a beautiful case, but the foundation upon which it is built is wrong, and so it tumbles down.

The error starts when you ask the question, "What did it take to fix that set . . . a couple of tubes that could have been replaced in the home?. . ." Are you implying that TV technicians willfully bring sets into their shops that could be serviced in the home. If you had ever attempted to explain to a customer why you brought a set into the shop that only needed two tubes replaced, you would not have made such a statement.

When you ask for fast, accurate, economical service, you ask for a nearly impossible effort, because of the word "economical" . . . for I must ask you, compared to what?(1) To the time and effort the customer would expend in servicing his own set?

— (2) To the service fees of your competition?

Certainly, if the economic situation deteriorates, all prices will fall. Certainly, if TV selling prices decrease, then TV service prices are likely to follow in that same direction. In the meantime, however, I urge TV service dealers to determine their costs, determine their desired profit, and adjust their prices accordingly. If John Q. Public thinks these prices are too high, it won't take long for dealers who are over-pricing to discover it, because their volume will collapse.

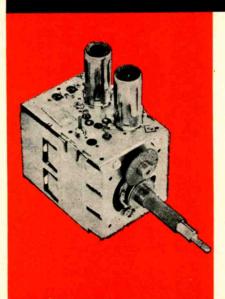
I love you like a brother, Don, but your statement, ". . . it would be a rather simple matter to carry the correct equipment with you in the truck in order to do a quick job" is a perfect illustration of my opening comment: you told us more than you know about it.

Everybody goofs sometime though, and I am sure that, like me, your other friends in the business will forgive you. However, if an ostrich ever siddles up to you, it might be because of this big egg you laid!

Best Regards,

J. W. Williams Jr.

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