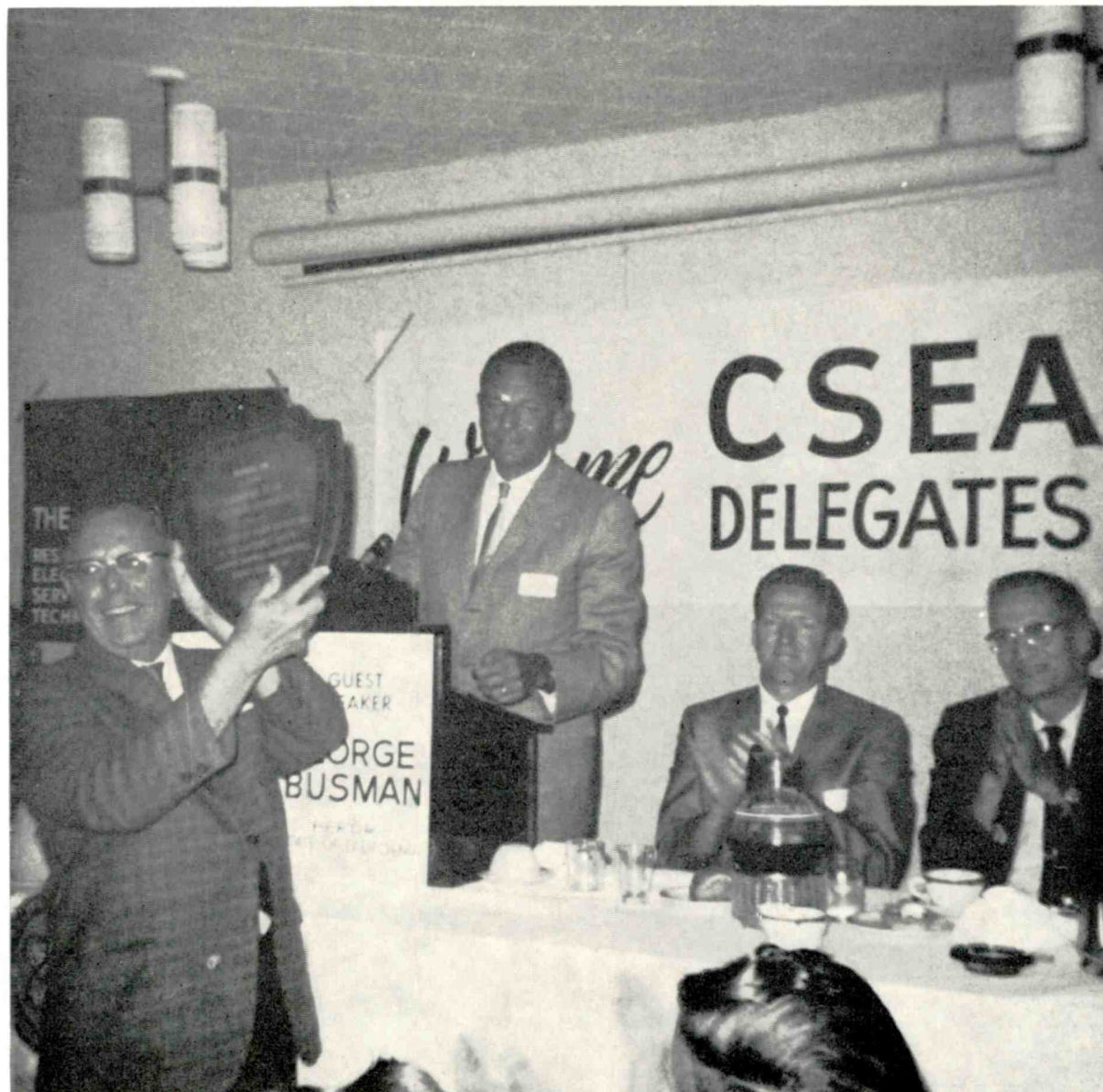


# electronic service dealer

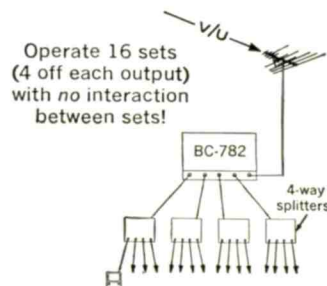
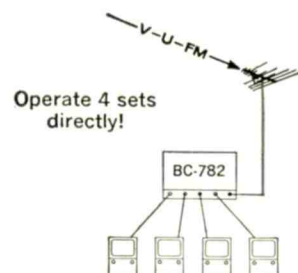
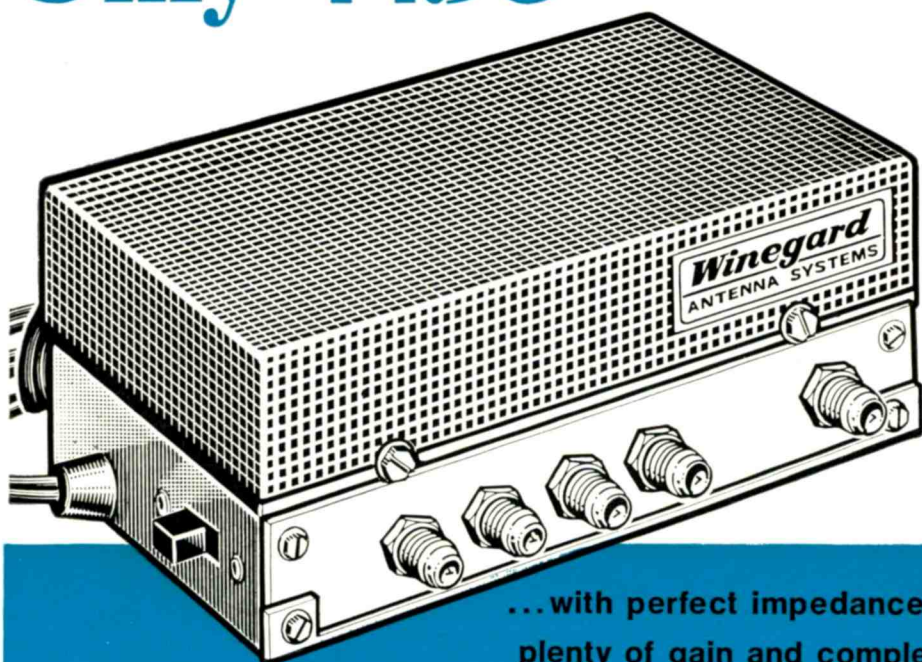
the official publication of the california state electronics association



**CSEA CONVENTION REPORT ISSUE**

AT LAST! THE PERFECT 82-CHANNEL  
(VHF-UHF-FM) HOME COLOR TV SYSTEM

# Winegard's New BC-782 82 Channel Booster Coupler Only \$44.95



... with perfect impedance match on all 82-channels,  
plenty of gain and complete isolation between sets!

Here's the greatest thing ever to happen to your booster coupler business... Winegard's sensational 75 ohm BC-782.

What makes the BC-782 so great? First off, it's an 82-channel booster coupler, the only truly operational and efficient TV signal amplifier that delivers *uniform gain* on all 82 channels.

It has solid state circuitry, incorporating 3 of the newest overlay silicon type transistors (temperature tested from  $-60^{\circ}$  to  $200^{\circ}$  C.) for long life... low noise figures to cut snow... and *full gain* on all 82 channels.

The BC-782 has extra power, too—enough gain to operate 1, 2, 3 or 4 sets directly—or as many as 16 sets (4 off each output) with *no interaction* between sets.

Even the housing is something special—with steel construction throughout (not plastic) comparable to the most expensive commercial units, for positive electrical shielding.

And that's not all. The BC-782 has plenty of other

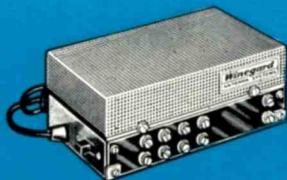
exclusive performance and construction features, including:

- Extremely high isolation between sets—no interaction—no need to terminate unused output terminals.
- Responds to the very weakest fringe area signals.
- Perfect for COLOR TV reception because of flat gain response on all channels 2 to 83, plus FM.
- Ultra-low noise figures effectively eliminate snow even in deep fringe areas.
- F-type 75 ohm jacks with connectors provided.
- On-off switch.
- Complete with mounting brackets and screws.

That's Winegard's new BC-782, the greatest thing ever to happen to your booster coupler sales. And with a great price to match—only \$44.95. Call your Winegard distributor today, or write for Fact-Finder #250 for all the facts, plus information about Winegard's new COLOR TV Booster/Coupler/Amplifiers.

#### Model BC-382

300 ohm twin lead Booster Coupler with same exclusive features as BC-782. \$39.95



**Winegard**  
ANTENNA SYSTEMS

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### DUNLAP ELECTRONICS

1800 18th St., Sacramento  
452-3171

### EDISCO, INC.

5901 Mission St.  
San Francisco, Calif.  
866-7087

### HURLEY ELECTRONICS

210 East Hardy, Ingewood  
678-7644

### SCHAD ELECTRONIC SUPPLY, INC.

499 S. Market St., San Jose  
297-5858

### PENINSULA ELECTRONIC SUPPLY

980 So. First St., San Jose  
294-8781

### QUEMENT ELECTRONICS

100 S. Bascom Ave.  
San Jose  
294-0464

# electronic service dealer

## STAFF:

DONALD J. MARTIN  
Publisher and Managing Editor  
CSEA Press Secretary

A. DIANE POWELL  
Associate Editor

FRANK BURNS  
Business Manager

JIM KIRBY  
Art & Cover Director

Vol. 7, No. 3

July, 1967

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## FRONT COVER:

Ralph Johannot, CSEA Executive Director is shown here holding up the special award that had just been presented to the Association by Robert Giannini, standing in center. The award was made by the General Electric Company for outstanding contributions of CSEA and its members to the industry in California. Seated at the far right is John Betz, President of NEA, and next to him is George Busman of the BERDR and principal speaker at the annual convention banquet.



CALIFORNIA STATE  
ELECTRONICS ASSOCIATION, INC.  
RALPH JOHANNOT  
Executive Director  
13543 S. Hawthorne Blvd.  
Hawthorne, California 90250  
(213) 644-4636

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Zenith is honored  
to be the only TV manufacturer  
to win NATESA's  
"Friends of Service" award  
five times!



Zenith supports the aims and objectives of the National Alliance of Television and Electronics Service Association. So we are especially proud to receive the NATESA "Friends of Service" award for the *fifth straight year*.

Zenith is the only TV set manufacturer to be so honored five times by NATESA.

NATESA members for many years have played a vital role in providing expert electronics service and in training new men for dedicated service to the public.

We at Zenith pledge our continued support and cooperation in NATESA's great program.

**ZENITH**® *The quality goes in before the name goes on.*



DON MARTIN

**CSEA Convention Notes**

A few weeks ago the California State Electronics Association held their annual Convention in Fresno and the complete report of this affair appears in this issue. Although I do not need to comment further in this column on its success I do feel a few remarks need to be said.

Over 150 dealers, their wives and guests attended the three day affair. This was a convention a few said would never be held, others said it couldn't be started on a Friday and still others predicted the usual turnout of bored Board Members. What actually happened is history and will be long remembered by everyone who attended.

A big surprise was the presentation of a special award by the General Electric Company to CSEA for its outstanding contribution to the service industry. To my knowledge, this is the first time a major manufacturer ever honored a trade association and indicates the recognition of CSEA as an important tool in shaping the future of this business.

This convention was void of the usual foolishness of selected special meetings. It featured key people from all over the State all taking part in the convention not just looking on and wondering what it was all about. There was also a realization that this industry has grown up and that the day of the integrated circuit and solid state home entertainment devices were here. Some of the men who have dropped out of CSEA in the past, because of its lack of direction or purpose, would shake their heads in amazement if they could have been there and seen what I saw from the opening luncheon to the final President's message.

There were many new faces and new leadership. New goals and new programs. Tremendous optimism for the future was everywhere. This was not a negative meeting by any means and along with the new faces came some old ones who have done so much for CSEA and are back for a second time around. Fellows like Bob Whitmore, Lee Hoy, Larry Schmitt, Emmett Mefford were there and coming back for more because they feel there is a purpose and a reason for a strong State Service Association. For every problem that has been solved, a new one has turned up. If it wasn't tube checkers its now extended warranties. If it was unethical practices or yellow page advertising it was CATV franchises. One thing is for sure . . . there is a need and a purpose for this Association and everything points towards a great future.

**Mutual Of Omaha Stops Solicitation**

In answer to a letter from the CSEA legal Advisor Mr. C. C. Montgomery, Mutual of Omaha has stopped their program of soliciting CSEA members for their income protection policy as outlined for NATESA. Mr. James Oglesby, M of O Director stated in his letter of June 1, "I assume that by now Mr. Joseph La Grone has informed you that we have ceased solicitation of the plan in the State. I am sure that you understand that there was no misrepresentation intended and that we were merely misled by information provided by the NATESA headquarters."

**Service Prices Go Up Again!**

Service rates took a big jump last year (see Aug. '66 and Oct. '66 issues) and they are on their way up again.

Reports from Service Dealers, throughout much of the nation, have shown an amazing change in their thinking towards service pricing. We have come a long way from when a technician was afraid to charge a fair service fee for his work.

Early worries about what would happen to business when prices first went up have turned into smiles of success. Technicians salaries have been raised almost universally. Shops have begun to replace needed equipment. Profits have started to make it all worthwhile.

The real shame-of-it-all happened to many of those shops who thought that they might pick up extra business by keeping their prices down and thereby profit. Unfortunately for them THEY WERE WRONG. Their business did not pick up as they had hoped. Their costs of doing business, however, kept on rising and now so many of those shops are no longer here. (Shockingly, many of those who lost their businesses never even knew why.)

**Prices Go Up Further**

This spring, service prices went up in many areas again. The reasons for these additional increases have chiefly appeared to have been:

- (1) A second round of salary increase for the TV technicians
- (2) Increased taxes and other overhead costs
- (3) "The sweet smell of success" for those who increased their prices last year.

Are these prices the top? Those asked have mostly said no! They feel the \$12.95 call (for all types of sets now) is just a step on the way to a very soon \$14.50 or \$15.00 for the basic service call.

The chart below shows some representative changes that have occurred this year, as compared to the prices which were in effect after last year's raise.

	FORMER RATES B & W -- COLOR		CURRENT RATES B & W -- COLOR	
<b>FIELD RATES</b>				
SERVICE CALL (30 minutes)	\$10.00	-- \$12.50	\$12.95	-- \$12.95
FIRST SET or first section of a combo	\$7.50	-- \$10.00	\$10.00	-- \$10.00
ADD'NL SETS or sections of combo (same call)- each				
CONVERGENCE / Cleaning TUNER CONTACTS } DIAL CORD replacement / Any SOLDERING } - - - - - add:	\$0.50	-- \$9.00	\$9.50	-- \$9.50
PICTURE TUBE replacement - - - - - Svc call plus:	\$4.50	-- \$15.00	\$9.50	-- \$19.50*
EXTRA MAN (15 minutes) - - - - - EXTRA TRIPS - - - - - add:	\$3.00	-- \$4.50	\$7.50	-- \$7.50
ADD'NL TIME & waiting time - - - - - ea addn'l \$ man/hr add:	\$4.50	-- \$4.50	\$4.50	-- \$4.50
<b>SHOP RATES</b>				
PICK-UP (one man only - add for EXTRA MAN, above) - - -	\$10.00	-- \$12.50	\$12.95	-- \$12.95
SHOP ANALYSIS - - (Transistor sets add \$10.00) - - - - -	\$4.50	-- \$7.50	\$7.50	-- \$7.50
DELIVERY (one man only - add for EXTRA MAN, above) - - -	\$3.50	-- \$5.00	\$5.00	-- \$5.00
Basic Service Fee - - - - -	\$3.95	-- \$5.50	\$5.50	-- \$5.50
If CONVERGENCE is needed - - - - - add:			\$7.00	-- \$7.00
Total	\$39.30	-- \$59.50	\$48.95	-- \$68.95
DEPOSIT IN ADVANCE - - - - -	\$25.00	-- \$80.00	\$25.00	-- \$30.00
<b>OVER THE COUNTER RATES</b>				
MINIMUM CHECK - - - - -	\$7.50	-- \$10.00	\$7.50	-- \$10.00
MINOR SOLDER-IN PART ONLY (no analysis) - - - - -	\$1.50	-- \$19.50	\$9.50	-- \$19.50
" with MINOR repairs - - - - -	\$1.50	-- \$19.50	\$17.00	-- \$27.50
PICTURE TUBE ONLY (no analysis) - - - - -	\$1.50	-- \$22.00	\$9.50	-- \$24.50*
" with MINOR repairs - - - - -	\$1.50	-- \$22.00	\$17.00	-- \$32.50*
MAJOR REPAIRS - - - - -	Same as SHOP ANALYSIS above (convergence extra)			

\*Convergence Included

**Observations**

The overall chart reflects about a 10 per cent increase over last year. The most significant  
(Continued on Page 18)

## LETTERS

Dear Don:

Please explain to your readers why automobile radio set service and repair business was not included in the State registration law.

When my place of business was inspected it was o.k. I gave up TV service and repair in 1957 and now do 98% car radio repair. The inspector told me if I only did car radio work I didn't need to register. Isn't auto radio repair work in the consumer electronic indus-

try anymore? It seems we have the same type of problems as the TV service Business. I just had a problem with a customer that got took real good by another auto repair dealer.

I belonged to RTA—20 years ago and didn't join CSEA. I have a two year subscription for ESD and started in the radio sales and service business in 1924 in Jackson, Michigan.

The reason for this letter is that it seems to me the auto radio service guys

are having a free ride and there are just as many unethical ones in this end of the business as TV service.

R. J. Gregg  
Rialto, Calif.

Dear Don:

I am pleased to announce beginning August 1, 1967, the California State Electronic Association Group Health and Life Plan will be improved.

The biggest changes are: major medical has been increased from \$10,000 to \$15,000, hospital daily room and board from \$18.00 to \$24.00, surgical schedule from \$300.00 to \$400.00, and convalescent care has been added.

These improvements were badly needed because of the increased cost in medical expenses. I am sure you will find this improved plan will work better for you and your family's peace of mind. Along with the improved plan we have an open-enrollment period. This means all C.S.E.A. members who apply for coverage through August 1, 1967, pre-existing conditions will be waived. For you who are not now members of the California State Electronic Association, and in order that you may take advantage of this and other C.S.E.A. benefits, initiation fees have been waived for the open enrollment period.

Contact Mr. Ralph Johannot at 13543 South Hawthorne Boulevard, Hawthorne, California 90250, for an explanation of benefits provided by C.S.E.A. and for applications to the health plan. We urge you to take advantage of these benefits.

Bob Martin  
Delmar Agency, Fresno

Gentlemen:

Please forward application for membership in your organization.

Since starting my own service shop four years ago, I have been a regular subscriber to your monthly magazine. I would consider it an honor to belong to such a worthy organization.

I would be happy to be interviewed by a representative of your Association, so that it might be determined if I qualify for membership according to your requirements.

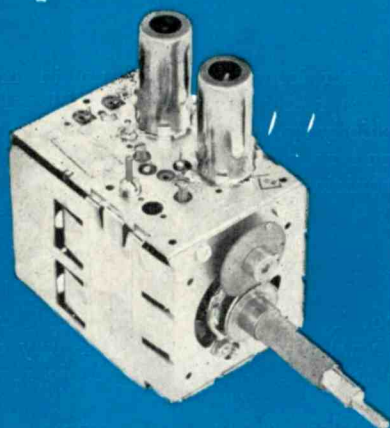
John McMillan  
Norco, California

Dear Sir:

In a letter to Mr. M. L. Finneburgh I have told him that our commercial "The TV Repairman" was designed to be inoffensive to everyone. However, in view of the concern that it might be misinterpreted, we have withdrawn it from the air.

David N. Huckert, Prod. Mgr.  
Bristol-Myers Co.

# TUNER REPAIRS



# \$9.50

**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 usage. 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.

 **SARKES TARZIAN, INC.**  
TUNER SERVICE DIVISION

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



# CSEA NEWS WIRE

A ROUND-UP OF STATE AND LOCAL NEWS OF  
THE CALIFORNIA STATE ELECTRONICS ASSOCIATION

## BOB WHITMORE APPOINTED TO BERDR

Robert Whitmore, past President of CSEA, has just been appointed by Governor Reagan to the BERDR advisory board representing the Industry. Whitmore replaces Capp Loughboro of Ventura in this position. Keith Anderson of Sacramento was re-appointed by the Governor to represent the industry as well. Dan Weston, former Chief of the Bureau, has been re-assigned back to the BERDR as temporary Chief until such time as a new one can be named.

ESD            ESD            ESD

## OVER 100 APPLICATIONS FOR INSURANCE OBTAINED FROM INSERT

Outstanding results were obtained last month from the four page insert that appeared in this magazine offering the CPIC major medical and health plan. These are being followed up as quickly as possible.

ESD            ESD            ESD

## IC PROGRAM SIGNED AS SERVICE FOR MEMBERS

The nationwide collection service of IC Systems was signed last month and is now available to all CSEA members. Under this program, this collection service will operate nation-wide to help members collect on bad debts, skippers, etc. A terrific plan for collecting that is in use by many Industry Associations throughout the Country.

ESD            ESD            ESD

## BBB TO USE NEA WARRANTY BROCHURE

The Los Angeles Better Business Bureau has picked up one of the NEA Warranty explanation brochures and have reprinted it in as a BBB booklet. Very few of the words have been changed and this gives the industry one more outlet to the consumer in explaining where and when warranties begin and end.

ESD            ESD            ESD

## DON MARTIN MADE LIFE MEMBER

ESD Publisher Don Martin was honored last month at the annual CSEA Convention by being elected as a life member of the Association. In making the award, new President Hugh Wilkins stated that this was made to show the appreciation of the Association for the many years of service the magazine has provided the industry as a whole.

ESD            ESD            ESD

## SIX CSEA MEMBERS PASS NEA CERTIFICATION EXAM LAST MONTH

Monty Huckle of Tahoe City, Ken Deedler of Millbrae, Ray Warthen of Vallejo, Ken Mendes of West Covina, Maurice Plante of Fontana and Ed Perinoni of Mendota all passed their NEA certification examination that was given during the recent CSEA Convention. This brings the total in California to 8 as a beginning. Monty Huckle now holds the highest test score in California at 88.5%.

ESD            ESD            ESD

## INSURANCE PROGRAM RE-OPENED

The re-opening of the Group Health Insurance Plan has been very successful. Benefits have been increased in most areas such as: \$15,000 major medical instead of \$10,000, \$24.00 daily room and board instead of \$18.00, \$400.00 surgical schedule instead of \$300.00, and convalescent care has been added. Initiation fees for new CSEA members have been waived for the re-opening period through 8/1/67. This improved plan will be effective 8/1/67 for all new and presently insured members. Monthly rates for single employee or employer is \$8.60, family of two \$16.97, and family of three or more \$23.89. Contact your CSEA office for detailed explanation of coverage and applications.



## PRESIDENT'S MESSAGE

ED FORT, JR.

### President's-Eye View Of A Significant Gathering

*The CSEA Convention:* exciting . . . inspiring . . . thought-provoking—how do you describe it? The bone and sinew of a dedicated, industry-serving, consumer-oriented segment of the home electronics servicing industry coming forward to direct a probing-in-depth of all the problems and gripes and frustrations of this much-maligned but increasingly essential part of the American scene.

Who were these probers? These disectors? These decision-makers? Were they the "big-wigs?" The "pie-cards?" The "brass?"—no, indeed. They were none other than the very most important part of any organization that counts: the day in and day out, hard-working pluggers for progress from the ranks, the ones who, in California State Electronics Association, make this organization the trusted friend of service technicians, shop-owners and householders alike, the ones who keep the flame burning.

I speak of people like Emmett Meford, Miles Sterling, Bill Lawler, Ray Merrill, Al Hartwig, Ralph Singleton, Vern Hassett, Monty Huckle, Ken Deedler, Al Cox, Taco Eno, Ray Murphy, Hal Baughman, Harry Midkiff, Wade Nelson, Jim Ballard—the M.C.s and panel chairmen who led discussions on matters important to the industry. And then there were all the delegates and members from local chapters throughout the State who thoughtfully considered the interests of the entire radio-tv servicing industry before casting their votes on important questions of policy and program and for the officers who will lead CSEA in putting them into effect. These are the dues-paying members of CSEA, acting not only for themselves but for all the freeloaders outside the organization who are shamelessly content to "let George do it." And there were the lovely ladies like Dorothy Schmitt, Marge Lawler and others, on hand to help keep things tidy and well-organized. And we certainly can't leave

out our ever-plugging, hard-working former president, Darrell Petzwal, with us in spirit but kept away at the last minute, stricken with ulcers and hospitalized. (What more appropriate ailment for one who has thrown so much of himself into trying to make chronic individualists see the many benefits to themselves of collective action with their colleagues in the radio-tv servicing field?)

*Among things that impressed me at the convention were:*

The sincere, ever-patient reaching out of our people for constructive cooperation with the set manufacturers to resolve problems of common concern to both industries . . . The tough admonition to these same manufacturers to stop trying to make the servicing industry pick up the check for their ever more extended and unrealistic warranties. (Let manufacturers reach into their own pockets, not ours, was the gist of rank-and-file sentiment among radio-tv servicers on this subject.)

. . . The admiration expressed for intelligent design from the standpoint of serviceability of sets, and the impatience—even contempt—for the "junk-makers." (Perhaps national awards, nationally publicized, for good design, and special booby prizes for bad design, might convey a message.)

. . . The firm determination to start charging professional rates for professional services . . . The revelation that, among bonafide servicers using professional equipment, \$10 to \$15 service calls have become a necessity for survival. (Let the tinkerer and butcher charge his cut rates; he knows best what he is really worth.)

. . . The problems we will be facing in the not too-distant future in servicing sets employing integrated circuits, as impressively revealed by Sylvania reps.

. . . The interesting new developments in all-channel antennas, amplifiers, matchers, etc., as described by the Winegard rep.

. . . The warm reception given to our old friend, Carl Huber of Philco-Ford, who missed out on the big Philco shindig in Las Vegas in order to be with us and give us some well-chosen words of encouragement.

. . . The deep absorption of 12 CSEA members taking the National Electronics Associations' self-certification test under the watchful eye of Indiana's Dick Glass. (Industry's way of determining the actual know-how of service technicians before the bureaucrats get into the act.)

. . . The pleasures enjoyed by CSEA members and their families, eating, drinking and having fun as guests of Raytheon, R. J. Ryan Co. (group income protection), General Electric, Winegard, Sylvania, Delmar Agency (CPIC Med & Hosp Insurance), Finney Co., Zenith, Major Electronics and Philco Parts. (Our thanks to all of you.)

. . . The bustling about of our popular, inspired, dedicated, ever industrious new State Executive Director, Ralph Johonnot, bubbling over with enthusiasm and new ideas to boost CSEA and the industry—some already produced and on display.

. . . The happy string-pulling and directing of convention chairman, producer, "set-designer" and general factotum, Don Martin (Ed. and Publisher of this mag in his quieter hours), gleefully rushing about keeping the show going according to plan while impishly poking fun at the "actors," to everyone's delight.

. . . The skillful finagling of apple-checked, fun-loving Rover boy from NEA, Dick (Ind #4) Glass, charming everyone into believing he just came out to pay his respects but busily going about getting everything he really came for, for the good of the industry. (How can you resist this guy?)

. . . The impressive fervor of thoughtful, sincere, dedicated NEA president, Jack Betz, from Iowa—splendid symbol of the growing pride and self-confidence of our industry across the nation.

. . . The delightfully charming Martin brood marching in to breakfast ahead of twinkling-eyed ol' dad.

. . . The intoxicating awareness among all present that CSEA is again on the upswing. (Thanks for this to the outgoing officers and Board of Directors under the steady hand of Ed Fort).

. . . The harmony of spirit, the lack of factions, the resoluteness of purpose, the confidence that now—at long last—CSEA is on the march! . . . And, finally, the realization by all that, as CSEA moves forward, the entire radio-tv servicing industry in California will move forward with it.





# Are you eligible for the Bright Guy Awards?

It's easy to get them—and to get all the business they'll bring you. New customers. More sales. More money.

The Bright Guy Awards is the big program Sylvania's running this year to boost your sales.

Your Sylvania distributor can put your name and address in TV Guide ads in your area. The ads call you "the brightest serviceman in town"—and tell people in your town why they should call you.



You'll get into the Yellow Pages, too, under the heading "TV Service and Repairs."

Once again this year you'll be eligible for over one hundred valuable, interesting



SMB-Bright Guy gifts, just for buying the Sylvania TV replacement parts you normally buy anyway.

And you'll get window displays proclaiming you "the brightest"—the TV serviceman everyone's reading about.

You're eligible for the Bright Guy Awards just by buying Sylvania's famous *color bright 85*<sup>®</sup> picture tube. And our other picture tubes, and our receiving tubes. So see your Sylvania distributor.



Sylvania Electronic Tube Division, Electronic Components Group, Seneca Falls, New York 13148.

**SYLVANIA**  
SUBSIDIARY OF  
**GENERAL TELEPHONE & ELECTRONICS GTE**

# OVER 150 MEMBERS AND GUESTS ATTEND ANNUAL CSEA CONVENTION

## FRESNO HACIENDA HOSTS OUTSTANDING SPEAKERS AND PANELS. CSEA ADOPTS RESOLUTION AGAINST EXTENDED WARRANTIES.

There was no doubt about it, from beginning to end the annual Convention of the California State Electronics Association was the finest in the group's history.

With heavy emphasis on business and technical problems, there didn't seem to be time to take a breather. In attendance there were well over 150 California dealers, their wives and guests plus some of the most outstanding speakers in the country.

Although many said that CSEA couldn't start a convention on a Friday, the vast majority of those who attended did arrive in time for the opening luncheon sponsored by the Raytheon Company.

Mr. Bill Posey, representing Raytheon, told the group of the importance of good business planning and practices. He outlined the fact that the future of each dealer depends upon how well he

has planned ahead for the technical changes of an advancing industry.

Our special guest for the day was Mr. C. C. Montgomery, who is the new legal Council for CSEA. A long term advisor to individual dealers and local CSEA chapters, he is well aware of the problems of our industry and is a great addition to the new staff.

Charles Gorrill, Assistant Chief of the MDTA/OJT program in California was the guest speaker for this opening keynote luncheon and outlined the interest and cooperation of his department in furthering the interest of young men in the home electronics industry.

### NEA's Dick Glass

Picking up right where Mr. Gorrell left off, Dick Glass, immediate past president of NEA, addressed the delegates concerning the part NEA is playing with the national office of Apprenticeship and Job Training. NEA is the official or-

ganization that is recognized by the Federal Government, through a special grant, to carry on a nationwide program of apprenticeship and job training for this industry. The NEA/OJT Field Coordinator is Gerry Barkoukus, himself a past president of NEA, whose job it is to aid local groups in setting up apprenticeship procedures.

In addition to going over the national apprenticeship program, Glass discussed the NEA Certification movement and outlined how NEA has tested several hundred dealers and technicians around the country with great results. To date there are over 300 NEA Certified Technicians and during the three day convention 12 of those attending took the test.

One of the top highlights of the entire convention, and the one presentation that had the delegates talking about for days, was the speech by Miles Sterling



A series of panels made up of outstanding service dealers was a big part of the three day CSEA convention. Ron Kealy, first picture, is shown moderating one of the panels while Hugh Wilkins, center, addressed another group. The third picture is an over all shot of how the panels operated. Discussed were extended warranties, business conditions and serviceability.

of Orange County. Miles was one of the first to promote higher service charges and he provided printed rate comparisons between his former rates and the ones he is currently charging. He discussed his own experiences in rate increases and how they have been accepted by his customers along with the best possible service he can perform. Not only did he raise his rates last year but is now charging \$12.50 for any type of service call whether it is color, black and white or stereo since a review of his records indicated the cost of each was identical. A complete report on this will appear in a later issue.

### General Electric Dinner

Prior to the annual General Electric Dinner, the delegates were hosted to a special cocktail party by the R. J. Ryan Company. This is the firm that is handling the new CSEA Income Protection Group Plan that is gaining acceptance by leaps and bounds all over the State.

Mr. Charles Richardson, the new Distributor Sales Manager for General Electric, from Owensboro Kentucky, was our host speaker. With Mr. Richardson was Robert Giannini the Western District Manager for G.E.'s tube division and he presented the first manufacturer's award ever given to a trade association to our knowledge. The Award, presented to Executive Director Ralph Johonnot, stated: "Honoring the California State Electronics Association in recognition of major contributions to the Electronic Industry" made by the Electronic Component Sales Operation, General Electric Co., June, 1967.

Following the presentation Mr. Richardson addressed the delegates and told them of the newest G.E. breakthrough called the Modular-tron. This is a new receiving tube that contains a complete circuit including transistors, diodes, capacitors as well as the receiving tube. He stated that with this tube a dealer will be able to replace an entire circuit as easily as he now replaces a compactor or receiving tube. He also voiced the opinion that receiving tubes would still be used in television sets up through the mid-1970's and that the replacement market in receiving tubes should be good for at least another 10 to 15 years.

The guest speaker for the first evening was George Busman who reviewed the activities of the Bureau of Electronic Repair Dealer Registration's activities, outlined some of the new legislation that is being passed and answered many of the questions of those in attendance.

Following this event everyone was on their own but most ended up in the many hospitality rooms provided by convention sponsors.

### Saturday

Would you believe that the "Eye Opener" breakfast had 122 people in attendance? That's the way it went all through the convention with full participation by everyone who attended. Mr. Everett Harris of the Winegard Company was the host speaker and he outlined the new innovations of his firm along with the special efforts being made to provide top notch receiving antennas for trouble spots. The best news was his report, as outlined by company President John Winegard, that the so-called Mini-antenna that was announced recently provides reception of about the same quality as the common rabbit ears. Although this antenna made big news a few months ago, it has little practical use in today's market place. He did say, however, that nothing is impossible and that someday there may be antennas of this type that will do the job of our current roof top units.

### Panel Discussions Add To Program

Three panel discussions made up of top dealers made up the morning session on Saturday with a lively talk about extended warranties, serviceability and general business conditions. Of particular importance was the panel on extended warranties since the panel consisted of a dealer who did no warranty work, another who was a captive service department for a Magnavox dealership, another who did all of the warranty work he could get ahold of and a fourth whose shop did about half of his business in warranty programs.

The outcome of this panel was a resolution, later passed by the delegates, for CSEA to oppose all extended warranty programs unless the Manufacturers financed both parts and service for the entire extent of the warranty they were offering.

*(Continued on Next Page)*

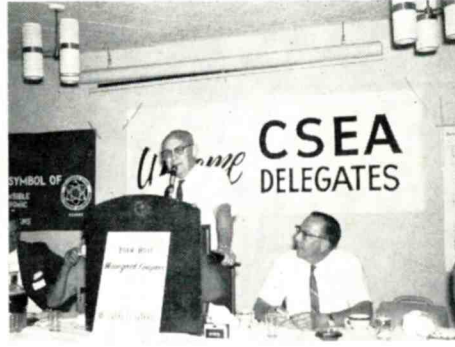
Top Picture: Charles Richardson, Distributor Sales Manager for G.E. (left) is shown here with Dick Glass of NEA (center) and Mrs. Don Martin, wife of ESD Publisher. Standing behind Mrs. Martin is Jack Betz, NEA President.

Second Picture: Phil Horowitz (left) and Steve Tidik (center) of Major Electronics are shown here talking over industry problems with Western Regional Manager for General Electric Bob Giannini.

Third Picture: Bill Posey of the William Posey Company, Raytheon Representatives for Northern California (left) was the host speaker at the keynote luncheon. Seated next to him is Emmett Mefford of Fontana the MC and Mrs. Lee Hoy is shown at the far right. Lee Hoy had stepped away for a few minutes.

Fourth Picture: The next two pictures were taken during the cocktail party that preceded the G.E. dinner on Friday evening. Needless to say, everyone seemed to be enjoying themselves.





DICK GLASS, NEA Past President, is shown here in the first picture as he outlined some of the many NEA programs on Apprenticeship and Certification. In the center picture we were pleased to have Jim Humphrey, Secretary of the Washington State Electronics Council, Inc., as a special guest speaker. He outlined many of the programs now going on in his Association throughout the State of Washington. Mr. Everett Harris, Northern California Factory Representative for the Winegard Company is shown in the picture at the far right as he explained the mis-conception of the mini-antenna that seems to be going around.

## CSEA CONVENTION

(Continued)

### Sylvania Luncheon

CSEA was extremely proud and pleased to have as the host speaker Mr. Walter Senges, Product Sales Manager for Sylvania's Semi-conductor division, during their Saturday luncheon. Truly one of the most outstanding presentations ever made before a State Convention. Mr. Senges presented a visual slide presentation on the use of semi-conductors, transistors and diodes in solid state circuits. He outlined what is in use today and how it will proceed in future home electronic devices. In his opinion the receiving tube will continue in use for some time because different circuits require different heat capacities. That the integrated circuit would continue to become more and more sophisticated and that the service dealer must equip himself for future developments. He also felt that economics would control the pace of development and that it would be the mid-1970's before the receiving tube would cease to appear in new home electronic products. Mr. Senges was assisted by Jack Murphy, Area Sales Manager and Ed Guthrie Area Sales Representative. Ted Napp, Area Manager for the Electronic Components Group was unable to attend, due to a prior commitment.

### Hugh Wilkins Elected President

That afternoon the annual CSEA election of officers took place with Hugh Wilkins, of Wilkins TV in Los Angeles, being elected as President of CSEA for 1967-68. Wilkins has been active in Association work for many years and is a past President of the local Los Angeles Chapter, Zone Delegate from that Chapter and State Director from the Zone. He is the immediate Past Vice President of the state wide association and now moves up to the top spot replacing Paul E. Fort, Jr. of San Diego.

Larry Schmitt of San Mateo was named as the new Vice President and Virgil Gaither was named as State Treasurer. Oakley Dexter was re-elected Secretary of the organization.

At the same time, the Board of Delegates elected their new officers for the year and named Jim Ballard, of Santa Clara, as the new Chairman of the Board of Delegates. Monty Huckle of Tahoe City was named Vice Chairman and Al Cox took over the office of Secretary.

Other new members to the State Board of Directors included the election of Lee Hoy to replace Norman James from Zone B, Roy Gybroski to replace Lloyd Kaun from Zone E and Everett Pershing to replace Capp Loughboro from Zone F.

### Finneyburgh Absent

Mr. M. L. Finneyburgh, Sr. was to

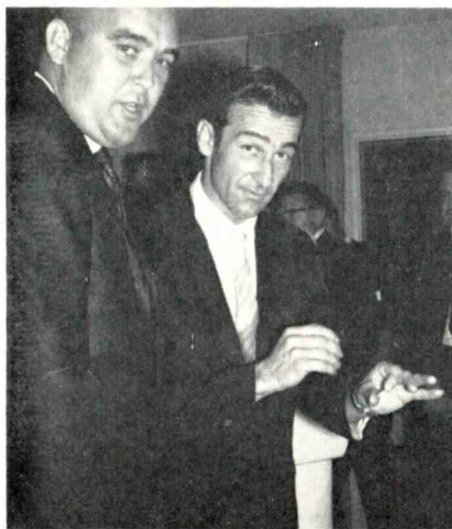
address the delegates at the annual CSEA dinner but was unable to attend. Although many dealers had come to the convention just to hear this outstanding speaker, it was impossible for him to get away and he has promised to make it next year. In his place we had Mr. Forrest Jordon and his lovely wife Jo as our hosts for the dinner. Mr. Jordon, new western district mgr. for Finney, expressed the sincere apologies of Mr. Finneyburgh and his deep regret in not being able to attend. Although there is no substitute for M. L., Mr. Jordon did a great job and was warmly received.

Our guest speaker was the national President of the National Electronic Associations, Mr. John Betz from Waterloo, Iowa. One of the most outstanding presentations of the entire convention, he told about the activities of NEA, its numerous programs and promotions and the success it has enjoyed since being formed just three years ago. He stated that there was a great need for unity between the different Associations but the very thing that drove them apart is keeping them from getting together. He offered to meet at any time and in any place with any person who is sincerely interested in protecting and promoting the Independent Service Dealer in this country. He sat down to a standing ovation.

Sylvania once again out-did themselves by being our host for an "after"



SYLVANIA'S SOLID-STATE LUNCHEON was one of the highlights of the three day affair. Pictured here at the left are Ed Guthrie, Jack Murphy and Walter Senges of Sylvania just prior to their slide presentation on the solid state circuitry. In the center picture, Walter Senges is shown as he addressed the group during the luncheon. In the picture at the far right, Ed Fort, Jr., President of CSEA, is shown making his final speech in that capacity during the President's Luncheon on Sunday.



The Sylvania Special "After Dinner" cocktail party was an outstanding success. Shown in the top picture are Monty Huckle of Tahoe City, Ken Mendes of Pasadena and Miles Sterling of Garden Grove. In the bottom picture, Ed Guthrie (left) of Sylvania points out some of the small integrated circuits that will be found in future television sets.

**PARTICIPATING  
MANUFACTURERS  
IN THE 1967  
CSEA CONVENTION**

- The Raytheon Co. Luncheon
- The General Electric Company Dinner
- The Winegard Co. Breakfast
- Sylvania Luncheon
- The Finney Co. Dinner
- Major Electronics Breakfast
- Philco-Ford Luncheon
- All Coffee Breaks sponsored by Zenith Sales through the De Jarnett Company of Fresno
- Cocktail Party by R. J. Ryan Co.
- All American Income Protection Insurance Program
- Champaign Cocktail Party by Delmar Agency for CPIC Major Medical Insurance Program

dinner cocktail party. A most enjoyable evening and the Management of Sylvania should be extremely proud of the people that had to represent their firm in Fresno.

**Sunday**

The "Bloodshot Eye" breakfast, that was sponsored by Major Electronics, was adequately named as many of the people who attended wore dark glasses. Major Electronics is the West's largest picture tube manufacturer and do a big job in private label picture tubes. Mr. Steve Tidik, General Sales Manager and Mr. Phil Horowitz were our hosts for Breakfast and Mr. Tidik quickly explained the functions of his company and expressed their appreciation for being asked to participate in the convention.

Jim Souther, Instructor in home electronics at Pierce Jr. College, was our guest speaker and told about the problems of convincing young people to enter this industry. However, he stated, things are getting a lot easier since the service rates have gone up and starting wages have risen in recent months.

Mr. R. J. Ryan was also introduced and outlined the new income protection policy his company is offering to all CSEA members and Bob Martin and Ken Keep representing CPIC outlined the major medical plan.

Both insurance firms hosted one of the finest champagne cocktail parties ever given the night before and should be publicly thanked for all of their and their wives, efforts in helping to make this convention an outstanding success.

**President's Luncheon**

The final highlight of the annual CSEA conventions is the President's Luncheon. This year it was hosted by Philco-Ford and we had as our host speaker Mr. Carl Huber. Mr. Huber is the Western Regional Manager of Parts and Service for Philco-Ford and one of the greatest boosters of the independent service dealer anywhere in the country.

Following his presentation, President Ed Fort thanked everyone for their help during the past year and presented special certificates of appreciation to members who had performed outstanding services to the Association during the year. Special awards were also made to Dorothy Schmitt and Marge Lawler for their help with the convention registration.

At this time, Hugh Wilkins the incoming President of CSEA, presented a special plaque to outgoing President Ed Fort in appreciation of his efforts during the past year. He then outlined his aims and ambitions for CSEA during the next 12 months and pledged an all out effort to make this the finest Trade Association in America.

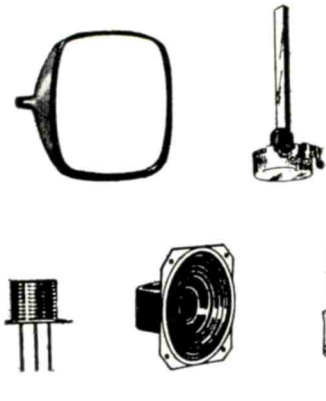
**ORIGINAL**



**FACTORY  
REPLACEMENT  
PARTS  
FOR T.V.  
& RADIO**

- DELCO AUTO RADIOS
- RCA
- ZENITH
- GENERAL ELECTRIC

**PLUS—THE BEST LINES  
OF GENERAL  
REPLACEMENT PARTS**



**ANDREWS**

**ELECTRONICS**  
1500 W. BURBANK BLVD.  
BURBANK, CALIF.  
TH 5-3536 ST 1-3120  
VI 9-6014

# electronic service dealer

## TRADE / TALK

### R. MARK MARKMAN CO. ACQUISITION ANNOUNCED

The R. Mark Markman Company, Los Angeles area Manufacturers' Representative, has acquired the C. E. Chorpening Co., effective June 1, 1967, according to an announcement by Mark Markman, President.

"This acquisition will expand our product base to give greater market coverage to our Principals," Markman stated. He also indicated that additional acquisition and representation of other manufacturers will be considered to provide specialized sales coverage in a variety of related markets.

Chuck Chorpening, former owner of C. E. Chorpening Co. will join Markman Company as Vice President of their Distributor Division. Chuck Chorpening brings a wealth of experience to the Markman Co. having been a Sales Manager for a Parts Distributor and a Sales Manager for a National Manufacturer, before going into his own Representative business.

The 15 year old R. Mark Markman Company's main office and warehouse is located at 4142 Lankershim Blvd., No. Hollywood, California 91602.

### "DRESS-UP CAMPAIGN" ANNOUNCED BY RCA TUBE DIVISION

Television service dealers and technicians can benefit personally from the purchase of four replacement type RCA HI-LITE and Colorama television picture tubes, between now and July 31, 1967.

Details of the new program—called "Dress Up With Quality From RCA"—were disclosed recently by J. J. Kearney, Manager, Distributor Sales, Distributor Products, RCA Electronic Components and Devices.

"This new promotion was designed by RCA to enable every service dealer or technician who purchases RCA color picture tubes to receive a valuable Van Heusen gift certificate for each RCA picture tube purchased during the promotion period," Mr. Kearney said.

"The picture tube types covered in this promotion are the H-21FJP22A and H-21FBP22A HI-LITE types, and the C-21FJP22 and C-21FBP22 Colorama types."

Every time one of these four tube types is purchased, and the "registration postcard" portion of the warranty card and "carton identification card"

are completed and returned to RCA, a gift certificate will be issued to the dealer for one Van Heusen shirt.

The shirts can be selected from the 20-page "Dress Up With Quality" Van Heusen catalog which has been sent to service dealers throughout the nation. This catalog contains a broad selection of permanently-pressed dress and sports shirts for both men and women.

Warranty and carton identification cards must be postmarked no later than July 31, 1967 to qualify for this offer.

RCA HI-LITE color television picture tubes contain all new parts and materials. RCA Colorama picture tubes contain used materials which, prior to reuse, are carefully inspected to meet the company's high quality standards.

Additional information on the "Dress Up With Quality From RCA" promotion is available from any RCA Color Picture Tube Distributor or RCA Distributor sales office.

### G.E. ANNOUNCES NEW NEW CONSUMER SEMI-CONDUCTORS

SYRACUSE, N. Y. — Low cost, medium power, plastic encapsulated transistors mark another introduction by the Semiconductor Products Department of General Electric with a device oriented to the consumer market.

Designated the D28 series, the silicon power tab transistors will find application in oscillators, amplifiers, buffers and output stages of TV, radio and audio equipments.

The new line has a rated dissipation of 1 watt at 50°C ambient, 1.2 watts at 25°C ambient and 4 watts at 70°C tab temperature.

Two voltage groups are available, D28A5 and 6 at 25 volts, and the A12 and 13 at 50 volts. Beta selection of 75-225 and 180-540, 2mA and 4.5 volts. Maximum collector current is 500mA. Operating junction temperature is 150°C maximum, typical Ft is 135 MHz. Standard lead configuration is in-line ECB, but can be formed to a TO-5 pin circle.

The new plastic encapsulated transistors can meet the requirements for class B or AB audio outputs, 1 to 3 watt-channel speaker power. Other application include power transistor drives for very high power amplifiers.

*(Continued on Next Page)*



PRESIDENT OF THE WESTERN SOCIETY OF BUSINESS PUBLICATIONS HOWARD OLANSKY (left) is shown here presenting the top award of that Association to ESD Publisher Don Martin. This award was presented to ESD for being the best Western Published Trade Journal, averaging under 48 pages per month, in the 11 Western States. Mrs. Marianne Martin, wife of the publisher, is shown in the center.



ONE OF THE MOST OUTSTANDING OPEN HOUSES EVER HELD was conducted by Associated Radio early this year in their distributing facilities in San Francisco. "Special Entertainment" from the local Roaring 20's night club sparked the event and several hundred dealers took a look at all of the merchandise.

## TRADE TALK

(Continued)

### PICTURE TUBE CATALOG AVAILABLE FROM SYLVANIA

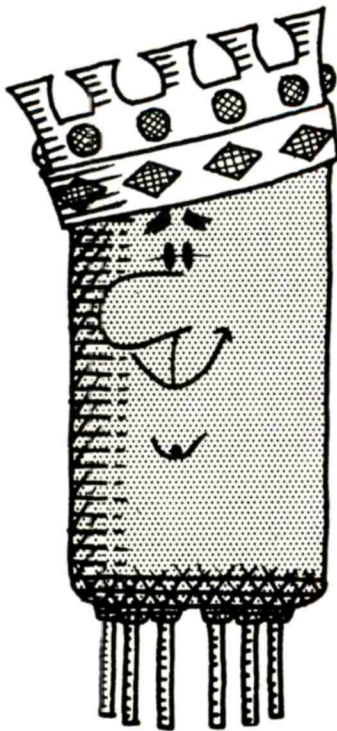
Seneca Falls, N. Y.—Sylvania Electric Products Inc. has announced the availability of a free, 42-page illustrated reference book containing key characteristics and data on 750 types of black and white and color television picture tubes. Sylvania is a subsidiary of General Telephone & Electronics Corporation.

The booklet, prepared by the company's Electronic Tube Division, provides a concise reference guide to all picture tubes in general, plus new TV receiver test tubes.

The new reference guide also includes illustrated comparisons of various picture tube protection systems, basing diagrams, interchangeability data and information on the handling of picture tubes.

The new edition can be obtained by writing to Sylvania Electric Products Inc., Central Advertising Distribution Department, 1100 Main Street, Buffalo, N.Y. 14209.

## GE... THE COMPACTRON KING



CREATING BUSINESS FOR YOU  
WITH MILLIONS OF  
NEW SOCKETS ANNUALLY.



SEE YOUR AUTHORIZED GE DISTRIBUTOR  
FOR ALL YOUR RECEIVING TUBE REQUIREMENTS.

GENERAL  ELECTRIC

288-05B2



JIM SPIKERMAN (right) of Plaza TV, 526 E. First Street in Tustin, is the lucky winner of the J.F.D. Color Laser Antenna Promotion run by Orvac Electronics of Anaheim.

LEO VACCHER (left) General Manager of Orvac Electronics is shown congratulating Mr. Spikerman in front of the freezer, which was the first prize in the program. Each participating dealer received a steak for each two JFD antennas purchased during the promotion.

## 12-PAGE TEST EQUIP. CATALOG FROM SENCORE

ADDISON, ILL. — A new 12-page catalog has been released by Sencore, Inc., manufacturer of electronic maintenance equipment.

The catalog, bulletin #360, describes the firm's complete line of 23 professional test instruments. Included are Sencore's two new picture tube checkers, the CRT CADET, model CR13, and the CRT CHAMPION, model CR143; as well as a new line of substitution units. Catalogs are available from distributors or by writing to Sencore.

## 1967 WARRANTY EXPIRATION CODES

1967	Standard	G.E.	RCA	Sylvania	Others & Notes
Jan. 31	6604	CV	AX	AB	
Feb. 28	6609	EV	AY	AC	
Mar. 31	6617	FV	AZ	AD	
Apr. 30	6617	HV	BA	AE	
May 31	6622	IV	BB	AF	
June 31	6626	JV	BC	AG	
July 31	6630	KV	BD	AH	
Aug. 31	6635	LV	BE	AJ	
Sept. 30	6639	MV	BF	AK	
Oct. 30	6639	NV	BG	AL	
Nov. 30	6648	RV	BH	AM	
Dec. 31	6652	SV	BI	BT	

# NEA "TECHNIBITS"

## CAUSE OR EFFECT?

In horizontal and vertical oscillator circuits. Where the cathode is grounded, grid bias is developed by oscillator action. Should the oscillator quit for any reason, the plate voltage will drop considerably. This low plate voltage is not usually the cause of the trouble. It's an effect, the result of no oscillator action.

## COLOR CALLBACK STOPPER

When servicing color receivers, switch from a color program to a B & W program and back (or on a color generator, switch from color bars to a convergence pattern and back) several times. Any delay in the appearance of color usually means the 3.58 MHz oscillator frequency should be checked and adjusted.

## CHECK THAT COLOR GENERATOR!

The subcarrier frequency of a color generator can change over a period of time, just as color receivers do. If it's off frequency, you'll come up with errors in receiver adjustment. Check and adjust it occasionally. It's easy! First, adjust a color set's 3.58 MHz oscillator to zero beat (floating color) on a station color program (preferably network). Then, using your color generator, adjust for zero beat again. This time, adjust the crystal trimmer in the bar generator. *Do not* re-adjust the set!

## SYNC AND VIDEO

Sync signals extend from the 75% level to the 100% level of the video transmitter modulation. This portion of the composite video signal is a constant and unvarying 25% of the total waveform of a signal containing white in the picture. Sync tips are at 100% of transmitter power, while white areas reduce transmitter output to a minimum. The changing, grassy appearing part of the scope display is the picture. Sync separators squeeze the "grass" into a fuzzy, fat line at the bottom of the sync pulses, or at the top depending on polarity.

## ABOUT PLATE VOLTAGES

In malfunctioning circuits where the plate voltage is low or almost absent, and plate resistors are OK, leave the voltmeter connected to the plate circuit and pull the tube. If plate voltage rises to source voltage, there is probably excessive tube conduction. Check grid and cathode voltages for additional clues to the fault.

## TRANSISTOR AGC

Transistor gain can be reduced by reducing bias or by reducing collector voltage. So-called "forward" AGC uses relatively high resistances in the collector circuit. When base bias is *increased*, the increased collector *current* results in an increased voltage drop across the collector resistor, causing a *lower voltage at the collector* and a reduction in gain. Forward AGC keeps a more constant loading on tuned circuits, preventing alignment shift. Caution: don't reduce resistor values in collector circuits of TV IF stages!

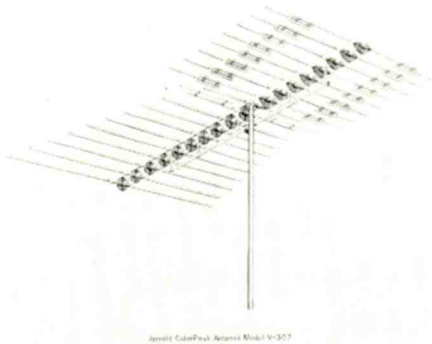
## "POSITIVE" AGC VOLTAGES

Those "positive" AGC voltages that you find in TV's made in the last five years or so really are not positive as far as the IF amplifier tube is concerned. You'll find that the cathode resistor and cathode voltage is so high that a fairly high positive voltage with respect to ground is still a negative voltage when measured from the IF amplifier cathode. This arrangement gives better AGC action on the RF amplifier, among other things.

## TRANSISTOR VIDEO AMPLIFIERS

Some transistor video output amplifiers do not amplify the sync portion of the video signal. The sync is not needed at the CRT anyhow, and blanking is provided separately. The signal handled is reduced by 25% and this allows an increase in output of the video portion of the signal of 1/3. Neat trick!





Jerrold ColorPeak Antenna Model V-307

**NEW JERROLD ANTENNA  
LINE INTRODUCED  
AT N.E.W. SHOW**

CHICAGO—Jerrold has just introduced two new 300 ohm outdoor antenna lines.

The 82-channel VUfinder and the VHF-TV/FM ColorPeak series are high-gain periodic types with unusually flat response across the full frequency range. They provide strong, clear signals even in difficult reception areas.

The five Jerrold VUfinder models, for local to deep fringe applications, can be converted to "Coloraxial" reception by using an 82-channel matching transformer model MUV-374. VUfinders are shipped with Jerrold model FS-1314 frequency separators to split VHF from UHF for separate inputs into TV sets. VUfinder list prices range from \$17.95 to \$79.95.

The seven ColorPeak models, for local to deepest fringe use, can be converted to "Coloraxial" reception through use of a VHF matching transformer, model TO-374A. List prices range from \$15.95 to \$79.95.

Both highly efficient antenna types have excellent front-to-back ratios. They are finished with Jerrold's superior corrosion-resistant Golden Armor Coating. "Cyclac" insulators provide superior strength at assembly points.

**POCKET COLOR VIEWER  
FOR TV PATTERNS  
AVAILABLE**

NEW YORK — A "Color Viewer" that separates the three primary colors in a color TV tube and magnifies them for easy analysis is available from the Electronic Tube Division of Sylvania Electric Products Inc.

The handy aid for color TV servicemen is approximately 2 x 2 inches with a small handle. It is constructed from a portion of a picture tube shadow

mask.

To use, the serviceman places the viewer on the picture tube face plate and rotates it until the dot pattern achieves the desired magnification of individual colors. The "Color Viewer" is particularly useful in visually demonstrating the necessity for repair or adjustment to a color TV set owner.

The "Color Viewers", priced at 60 cents each, are available through Sylvania Electric Products Inc., Central Advertising Distribution Department, 1100 Main St., Buffalo, N.Y. 14209.



**NEW SENCORE MIGHTY  
MITE TUBE TESTER**

A faster, more versatile tube tester, the TC142 Mighty Mite V has been announced by Sencore, manufacturer of professional test instruments. With an added new Magnoval socket, Mighty Mite checks all the latest types; over 3,000 foreign and domestic tubes in all.

Now featuring a horizontal in-line switch arrangement, the new unit is said to assure even faster setups than previous Mighty Mites.

The Mighty Mite V makes full emission, grid leakage and shorts tests. Each tube is tested under full rated load to find borderline and tough dog types quickly and easily. The Mighty Mite V's high sensitivity of 100 megohms or one-half microamp of grid current tracks down the intermittents, the plain leaky, or otherwise hard-to-find tubes. And using the time-proven stethoscopic approach, Mighty Mite V picks out true interelement shorts, with each element individually tested against all of the others one at a time.

Exceptionally compact and completely portable, the Mighty Mite V is housed in a tough, rugged, vinyl-clad steel case with detachable hinged cover for full protection when not in use. An up-to-date setup booklet is included. The complete unit is priced at \$74.50.

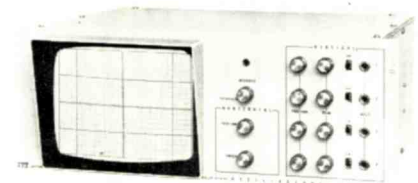
**COLOR TV SERVICE  
MADE EASY BY SAMS**

After a serviceman copes with the troubles that develop in a color-tv set a number of times, he soon develops a practical understanding of the problems to look for when he encounters this same model again.

This type of practical, model-by-model servicing information, gathered into the first volume of COLOR TV SERVICING MADE EASY, proved so valuable that the book became a top seller.

Since its publication, the tremendous increase in color-set production has made a second volume necessary. This follow-up book, COLOR TV SERVICING MADE EASY, Vol. 2, by Wayne Lemons and Carl Babcoke, covers the makes and models of color receivers from 1964 to the present time.

Like the first volume, it also serves as a working guide—bringing the technician up to date on new color circuitry and developments introduced since the first volume was published. Then, it gives service hints and procedures by make and model for most of the newer color receivers.



**NEW LARGE SCREEN LOW  
COST OSCILLOSCOPE  
INTRODUCED BY ITT**

SAN FERNANDO, CALIF.—A new large screen oscilloscope, the KM-910, has been introduced by the Industrial Products Division of International Telephone and Telegraph Corporation.

The new instrument has a 9-inch rectangular viewing tube (22.9 cm) with a viewing area of 4.7 inches by 6.3 inches (12 x 16 cm)' solid state design and a 7-inch high front.

The KM-910 is designed to handle low cost, large screen monitoring applications.

## ESD/EDITORIAL

(Continued)

changes shown are (1) Making all service calls the same price, Black & White or Color. (2) Raising the "extra trip" and the "extra man" fees; and (3) A raise in the overall fee, when a set is brought into the shop, of about \$9.45.

Other changes, although not quite so significant, can be noted in the "Over The Counter Rates," wherein before if a minor solder-in type part or a picture tube was replaced and some other minor work was needed (such as diagnosing and replacing a small tube) there was usually no extra charge. Now the customer is charged an extra \$7.50-\$8.00 when extra minor work is authorized.

As might be expected, the results from these increases have, so far, only been good. The 10 per cent increase is not as big a change as was last year's 25 per cent overall average increase and therefore not quite as striking. However, reports from those service dealers who went up the full 25 per cent last year, and the additional 10 per cent, again this year, have been exuberant (one even bought a new house).

### Deposit In Advance

Please note the "DEPOSIT IN ADVANCE" under the SHOP RATES. This is a concept which is quite new to this industry and has not been covered by this magazine before. In a future issue a report will be printed, on the astonishing success some dealers have had by requiring deposits, as shown, BEFORE they will start on a set in their shop.

### Price Lists Available

If you would like a complete service price schedule, much more detailed than shown here, please send a stamped and addressed envelope to the magazine. A copy will be sent without charge. The price list consists of three pages 5½x8½, and covers such things as the newer antenna service rates, warranty handling fees, transistor service rates, TV, etc.

## CLASSIFIED ADVERTISING

**WHY FIGHT IT— IT'S BIGGER THAN THE BOTH OF US!** Mamma & poppa can't handle it anymore! Too much work for one man. Well established store in Hollywood. 14 years same location. 80% service, 20% sales. Well equipped, major street, large parking lot, good looking store, no junk shop. We do a very good antenna business. Lots of bench space. Very fine clientele includes Hollywood luminaries. Sales could be expanded with little effort. Great situation for two hard young workers or a takeover for a factory branch service outlet. Potential unlimited. Price \$1,000,000. Come and see us, my arthritis might allow me to bend somewhat. Howard Singer (Day & Night TV Service Co.), 7558 Sunset Blvd., Hollywood, Calif. 9046. Day phone 876-0583/Night phone 657-3073.

### FOR SALE: TV-FURNITURE STORE

Netting \$2000 month upward!  
Easy operation. Established 5 years. Prime location. Good lease. Exceptional opportunity. Owner retiring. P.O. Box 688, Oakland, Calif. 94604.

### HEALTH PLAN OFFERED

SAVE more than 40% on your Hospitalization Plan. Call J. Wartels—Insurance Counselor to Electric League.

JACK M. WARTELS  
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Low shipping costs anywhere

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## KIESUB CORP.

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Long Beach 591-1335 & SP 5-1428

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IN

Santa Rosa, 542-5423  
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Walnut Creek, 934-3000  
1263 Arroyo Way (94596)  
San Rafael, 453-1130  
134 Jacoby Street (94901)  
Hayward, 537-5833  
21726 Meekland Avenue (94541)  
San Jose, 295-6818  
522 So. Bascom Ave. (95128)

## NORCAL ELECTRONICS

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Sacramento, 442-9041

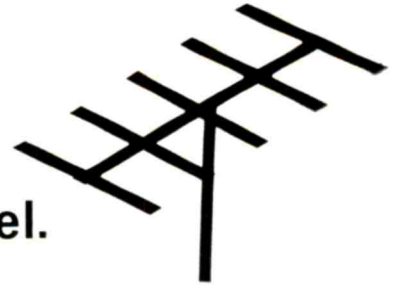
## WESTERN RADIO & TELEVISION SUPPLY CO.

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From now on, the antenna is the only equipment you'll ever need change to make any MATV Installation 82-channel.

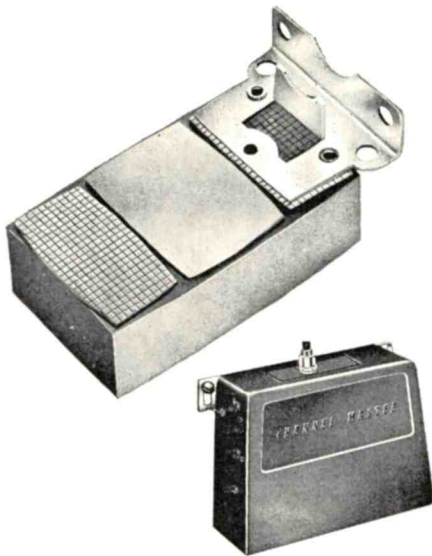


## **New Channel Master *CONTINUOUS* MATV Color Amplifiers bring in all 82 directly "on channel".**

They said it couldn't be done...continuous 82-channel, on-channel amplification in a single electronic circuit! But trust Channel Master... pioneer in coordinated MATV components...to find the answer. Now, with new Color Boosters, Color Tandem Amps, and Color Distribution Amplifiers, all 82 channels come in **directly** on frequency. Furthermore, continuous U-V coverage is obtained without com-

promising on any frequency or sacrificing gain to achieve bandwidth. When you install this new equipment any VHF MATV installation is automatically UHF-capable, too. The only thing you ever need change is the antenna.

So...if you're designing for VHF, use these amplifiers. If it's UHF, use these amplifiers. If it's UHF and VHF, use these amplifiers.



**15 DB COLOR BOOSTER** (Model 7264). Mast-mounted 75 ohm preamplifier with separate power supply. Also available in 300 ohm (Model 0062).



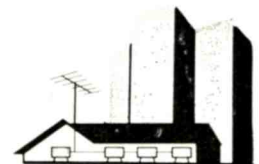
**15 DB COLOR DISTRIBUTION AMPLIFIER** (Model 7263). 75 ohm MATV distribution amplifier. Also available in 300 ohm (Model 7260).



**30 DB COLOR TANDEM AMP** (Model 7261). Separate 75 ohm preamplifier and amplifier. Also available in 300 ohm (Model 7262).

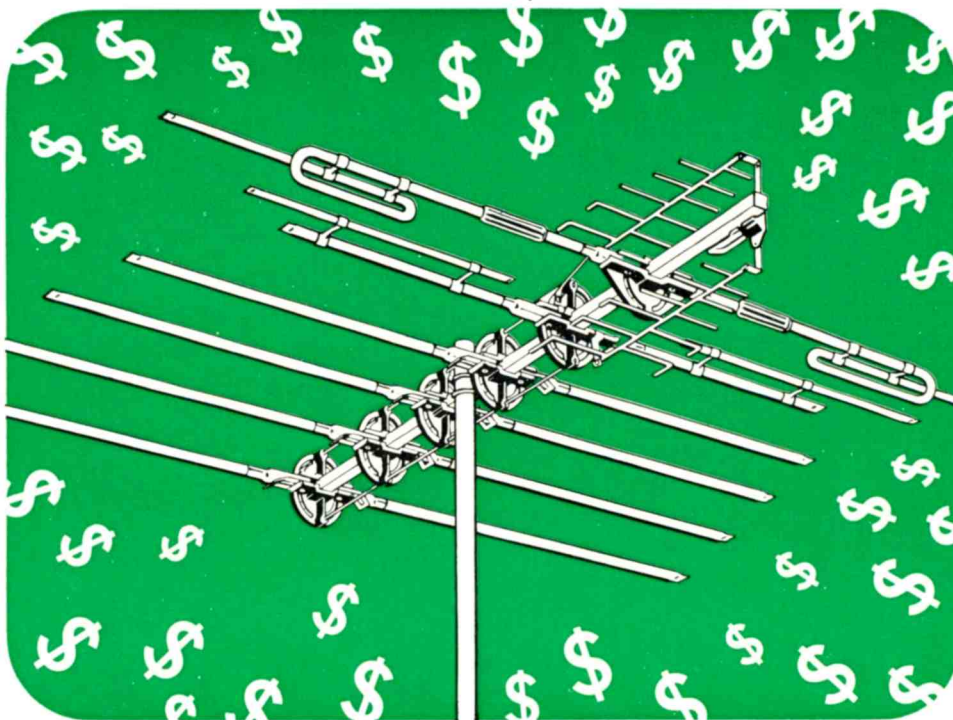
And, these new amplifiers are matched with a complete line of UHF/VHF coordinated equipment: Baluns, Splitters and Mixers, Attenuators, Wall Tap-offs, Line Drop Taps, and Matching Transformers. Add new Channel Master Color-Duct 82 Coax Cable (its loss is so much lower you can actually revise your cable calculations) and you're ready **now** to install the most efficient 82 channel MATV systems available anywhere.

**CHANNEL MASTER**  
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# Pull in more profits with Jerrold VUfinder® Antennas



Now—a line of antennas designed to deliver quality performance without eroding your profit margin. The Jerrold VUfinder 82-channel Antenna line. Perfect for bringing you the best in VHF, UHF color and black and white, plus FM reception:

- Excellent front-to-back ratio eliminates interference
- Unusual flatness assures greater color fidelity
- Sharp directivity eliminates ghosts, picks up strong, clear

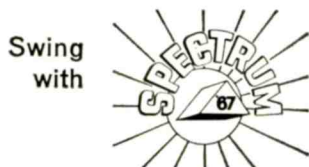
signals—even in difficult reception areas

- Tough, all-weather construction of vibration-proof, point-contact element locks, rugged Cyclocac insulators and twist-resistant boom
- All parts snap into place—anywhere—on the ground or on the roof

In short, all the benefits of the Jerrold Colorpeak line—plus UHF—are available with Jerrold VUfinders.

Compact, rugged, easy to install, Jerrold VUfinders come in five models ranging between \$17.95 and \$79.95 List.

The VUfinder line is one of a complete spectrum of problem-solving Jerrold reception aids—Pathfinder, Paralog Plus, and Colorpeak antennas... Powermate pre-amplifiers, amplified-couplers, and splitters... coaxial cable, wall outlets, and wall plates. Get more details. See your Jerrold distributor, or write for our new catalog.



*Focusing on one thing...  
 better reception*