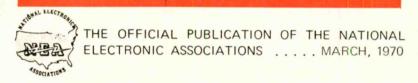
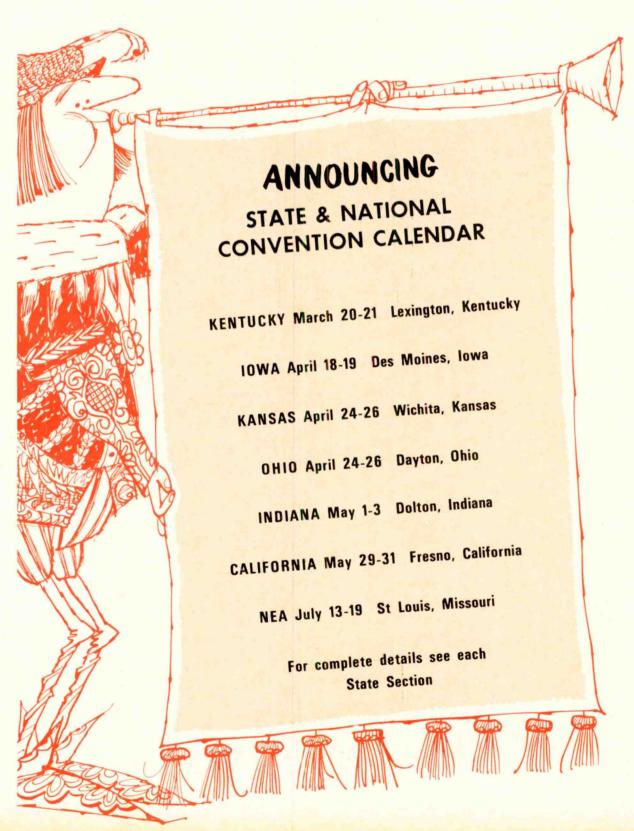
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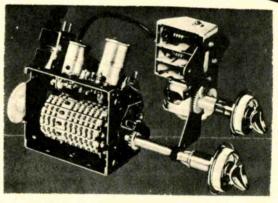
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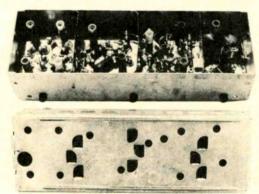
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ELECTRONIC service dealer

THE OFFICIAL PUBLICATION OF THE NATIONAL ELECTRONIC ASSOCIATIONS MARCH, 1970

features

- 9 MAJOR ATTRACTIONS TO GREET NEA CONVENTION DELEGATES . . . Social highlights for the NEA convention are reviewed. Part of a continuing outline of plans for St. Louis this summer.
- 11 NATIONAL SERVICE CONFERENCE AND AIEA CONVENTION DRAWS HUNDREDS. A review of the recent NSC meeting in Peoria, Illinois and the establishing of a new state association in Illinois.
- 13 CALIFORNIA SECTION . . . Virgil Gaither discusses the industry abuse. CSEA newswire.
- 18 HOOSIER TEST PROBE . . . O.C. Brown reviews activities in Indiana.
- 19 IOWA BEACON . . . Clark Pohl talks about the coming convention . . . Iowa News Notes by Ed Vilimek.
- 22 KEA NOTES . . . Plans for KEA State Convention outlined by President Emmett Hughes.
- 23 KETA NEWS . . . KETA Convention slated for Lexington. Convention program features color TV training sessions and social activities. Free Enterprise discussed by guest editorial writer Cliff Sachlegen.

departments

- 4 LETTERS
- 5 EDITORIAL
- 7 NEA PRESIDENT'S REPORT
- 8 FROM THE V.P.

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letters

Raybro RCA Distributors Tampa, Florida

Dear Mr. Brown:

We would like to take this opportunity to congratulate your company.

While in Forida last week I stopped at your company to purchase an RCA

portable TV set. We were refused purchase of this set, even tho we are an RCA dealer, because you sell to franchised dealers in your territory only. This answer eliminated all excuses, for example, "we had to sell him a set because he is the purchasing agent for one of our industrial accounts."

I can't think of a better way to create

a fine dealer, distributor relationship.

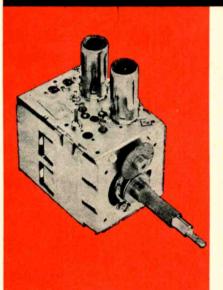
Could you please take the time to let me know how long this policy has been in effect, why it was started and if any of the other manufacturer, distributors do the same? It would be nice if this policy could be adopted nationally and to carry it further, keep the manufacturer from selling in the distributor territory.

Thanking you and awaiting your reply,

Sincerely.

Senatra Radio & TV Service Joe Senatra

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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.



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

Dear Mr. Glass:

We were pleased to receive your letter pertaining to the serviceability complaint of our Panasonic model CT-61P(15" Portable Color TV).

We understand that the chassis has some serviceability in-convenience, because the chassis design is so compact. We have provided a service connector kit to improve the serviceability from the very beginning of the sales. Also, this kit is available from all Panasonic Factory servicenters and Parts Depots at a nomical charge.

In addition, we have organized a service ability committee since we found the inconvenience service on this model. This committee consists of our service technicians, service manager, national service manager, product specialist and factory engineer. Committee meetings are now held at the time the prorotype samples are available. We believe that all service technicians will notice the design of our 1970 line of color TV chassis having given service attention to serviceability.

We are always very glad to receive any kind of suggestions or recommendations from your organization.

If we can be of any further help, please do not hesitate to contact us.

Very truly your,

Richard T. Miyagi Matsushita Electric Corporation of America

editorial



DONALD J. MARTIN, Editor/Publisher

From all reports, the recent National Service Conference in Peoria was an outstanding success. When over 70 representatives of associations, manufacturers, representatives and distributors meet under a common cause it is really a tribute to the electronic service industry.

For many years we have advocated the closer relationship between the different segments of our industry but there always seemed to be some reluctance on the part of certain people to attend. Whether or not they thought these sessions would only be a complaint department may have caused some to stay away but I honestly believe that most of the former "reasons" have been eliminated and we can look forward to greater understanding and cooperation between all segments.

I was particularly disappointed in not being able to attend this session, especially since we were to sponsor the event. I was scheduled to leave for Peoria on Wednesday morning but became very ill on Tuesday evening. Even as late as Wednesday I felt I might be able to get out that night but ended up in bed for the next five days. Since I was raised in Peoria, and still have many

friends there, it was most disappointing not to be able to make it. I do want to take this moment to extend my sincere appreciation to those of you who took over for me and to apoligize to the people who accepted our invitation to participate in the conference. I can assure you that we will be on hand for the next one.

I also want to congratulate the Illinoise service dealers on the organization of their new AIETA and to welcome them as an important new addition to NEA's growing family of state association affiliates. There is little doubt that NEA needs you as a strong organization and that NEA can be a major help to you in your programs and plans. I am sure that every service or sales dealer in the United States would want to purchase and distribute this type of literature to their customers. The manufacturers, through E.I.A., might want to publish such a brochure that will "tell it as it is" and I know the dealers will do their part in distributing the material to the consumer.

One of the major topics of conversation at the National Service Conference was the recent government release of fire and smoke problems in television receivers. We venture to say that every manufacturer can come up with hundreds of pages of documented proof that the occurance of fire in a television receiver is so insignificant as to make the government's claim ridiculous. E.I.A.'s Consumer Electronic Division presented much of this information to the HEW but it was not taken into consideration when the

material was released to the nation's news people. In our opinion the action by the HEW was irresponsible and did a great injustice to the television industry.

For example, we happened to see a report by the RCA service company that indicated their records showed the incidence of fire and smoke in television sets repaired by their operation was something like the old saying, "one in a million."

I honestly don't know how much more damaging "consumer protection" news flashes we can take as an industry. If it isn't radiation or fire in television sets it will probably be something else. I wouldn't be surprised to see something come out on picture tube explosions next.

What this all means is that we must stick together as an industry and these national service conferences should become more and more important as time goes by. If this is the type of beating we must take as an industry then, as an industry, we must learn to fight back. The truth must be heard and it is the responsibility of all of us to provide the evidence to disprove false claims and to publish this material for the consumer. In fact, I would like to see the industry publish a booklet on radiation and fire with the correct information.

If the national news media will not report the industry's side of the story, then the industry must publish it's own side. This type of damaging material effects us all and it is up to us to correct it. There isn't anyone else.

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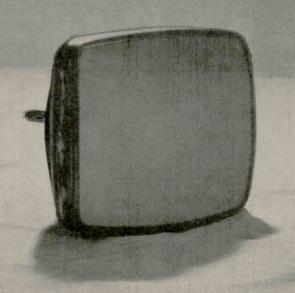
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Harrison, New Jersey



NEA president's report



by EMMETT MEFFORD, C.E.T.

I would like to share my feeling of great satisfaction with my fellow Service Dealers and personnel of this great industry of Electronics, after attending the third National Service Council in Peoria, Feb. 5, 1970. Some forty years ago with a meager beginning in the service trade known as the Cat-Whisker and Crystal reception area was intriguing, but now to see and be a part of the tremendous growth of the Electronics Industry is very gratifying.

I personally had the pleasure of meeting and talking with these men representing major manufacturers, parts suppliers and electronic trade magazines at the National Service Council. Representing the Service Dealers I want to personally commend these men for taking time from their busy work schedules to become involved with the planning and further development of the National Service Council. The exchange of ideas at these meetings can alleviate many conditions in the industry before problems can accure.

Pre-interpreting some of the benefits which can be resolved at this type of meeting can be of tremendous importance for the entire Electronics Industry. I envision some of the results as smoother operating procedures

through better communications, greater public acceptance of merchandise with quality control restrictions with serviceability in mind. Also some meaningful plan for standardization of tubes and parts to alleviate the some time long delay in repairing customer's equipment. Important is the availability of parts when needed and where these can be obtained with a ACCURATE cross reference guide for same, Next is Serviceability, a unit that is designed so that it may be serviced with reasonable engineering skill and at a nomical cost to the customer.

All of these observations if properly planned and put into operation can benefit the entire Electronic Industry. To summarize, the manufacturer benefits by better public acceptance of their merchandise, the parts supplier has less cost in tooling for production needed, technical magazines and books improve with better communications, the distributor, possibly the greatest benefactor with less floor space and capital needed, the servicing dealer with the last personal contact with the buying public also benefits by a better, efficient and profitable operation, and to this end a satisfied customer is the name of the game.

from the V.P.



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

COMMUNICATIONS PROBLEMS x COMMUNICATIONS PROBLEMS = CP²

Recently in a debate concerning one NEA project, one party said: "If you had just sent me a copy of the proposal, I would have understood." Someone else said: "Well, the problem is, that even though you have been supplying Mr. X with complete info, I didn't know what was going on, nor did others in our group." Yet another, after some a mmount of discussion on a controversial subject, said, "I didn't understand your terminology, I thought you meant something else."

It seems clear that we have to work on improving NEA communications. And it seems pretty simple. All we have to do is make sure that everyone gets full information on each project, and that the words are crystal clear!

But here is the problem of the past, and the problem we are faced with in NEA: Let's use the Hall of Fame for an example. The Hall of Fame committee chairmanned by Cap Enyeart, CET, held a committee meeting in Peoria on Feb. 6. It would seem that first, any absent members of the committee should be informed of their actions at Peoria. Then each committee member should get a copy of the meeting minutes, and the permanent files should get a copy in Lincoln, Nebraska. And since it has been a project evolved by NEA, and many NEAers are still backing it strongly and doing most of the work, why shouldn't each state president get a copy of the action? There are 27 of those. Also each NEA officer should get a copy (12). And usually any notable action should get sent to the internal and external publications and the trade press (37). What about state executive directors, secretaries, key persons within the state and the present living members of the

Hall?

No doubt there are pros and cons as to how this should be handled. Some would no doubt say just the committee should be advised and should continue their work, and let the major actions or new selections to the Hall serve to notify the world. Others would not settle for less than complete distribution of each and every detail of any meetings or actions of the Hall of Fame.

Now, let's look at another, possibly more complex project: Serviceability. Concerning National Service Conference meetings, In plant inspections, Group inspections, individual serviceability survey complaints, guidelines, news releases, manufacturer correspondence, check point evaluation forms, check point reports, and on and on . . . who should get complete information? The Serviceability Committee Chairman? Or the whole committee (11)? Or how about all the peoply who have worked on one or more portions of the project? And certainly most of the manufacturers should be informed of committee actions that are directed towards them. And all the trade press has to know what we are doing on Serviceability. So it becomes pretty obvious that just the communications concerning Serviceability is not simple. And look, we didn't even mention informing all the state presidents and key men about the committee's most important work.

Add to this the several committees that must make decisions about how to come up with a workable and successful and profitable convention in July and understand that the convention must be coordinated with most every

committee and involve every state. Then we have other important committees that involve each state group and other organizations outside NEA. Apprenticeship, budget and finance, CET, publications, technical information, insurance, warranties, elections, awards, industry advertising, radio-TV liaison, legislative, public relations, industry advisory, surveys and facts, associate membership . . . and the work that goes on with individual states, either helping them on conventions or internal projects, or helping to get new ones started. This is all part of NEA's work. You can add to the list, to complete your picture of the activity that is going on at present.

Now back to the problem: How do you improve the communications by making sure that everyone gets full information on each project, and that the words are crystal clear?

We can, by understanding the problem, improve. However, with the membership we have at present, and therefore the staff and budget we are attmpting to work with, the chances of completely solving it are small. There is only one way, without finding some quick source of income to expand the staff to cover all these bases on each project. The answer is to cut back on the number and scope of our activity. And that is the simple decision we need to make. Are we attmpting too much with our present resources? So much that we are headed for troubled waters because of poor communications? Or can we afford to keep up the pace and let understanding by the national, state, and local association leaders solve our communications problems till we grow a little more? The problem is crystal clear. The answer isn't.



The famed St. Louis Gateway Arch, the highest national monument in the nation, will greet NEA Convention goers July 13th to 19th. The Arch features rides to the top and a view for hundreds of miles.

MAJOR ATTRACTIONS TO GREET NEA CONVENTION DELEGATES

Again we bring you news from "Surprising St. Louis" on our BEST, BIGGEST, most BOUNTIFUL CONVENTION EVER: July 13 to 19.

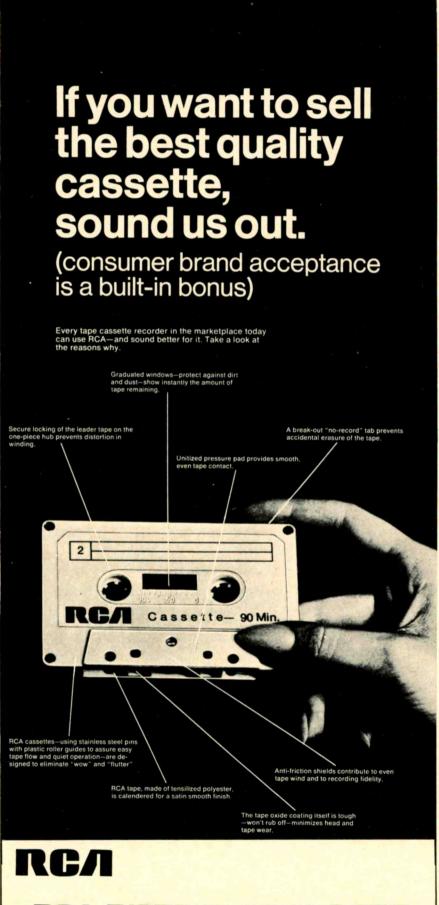
We have told you about the fabulous Convention Headquarters; Stouffer's River Front Inn, on the banks of the Mississippi River; the river boat trip on the world's largest all steel air conditioned steam boat, the Admiral, and the Friday night late show on the only remaining old time Show Boat, (a National Historic Land Mark) where you can hiss the villian and cheer the hero, while sipping your favorite drink.

Now we will tell you of the Gateway Arch, the highest National Monument in the country. We will schedule rides up into the arch, by elevator-cable car train for you. Looking from the observation platform within the Arch, a panoramic view of St. Louis and the metropolitan area of Illinois can be seen; and it's fabulous at night. Under the arch (below ground) is the Jefferson National Expansion Memorial Museum. Here you will find depicted the Lewis and Clark Expedition and many other events relating to our Westward Expansion history.

A short walk from the Arch is the Busch Memorial Stadium, the home of the St. Louis Football and Baseball Cardinals. The baseball Cardinals will be in town during the Convention, the nights of 16, 17 and 18 (night games). If this will not interfere with other activities already planned, we will obtain tickets for those wishing to go to any game. The St. Louis Sports Hall of



A visit to the old cabin home of President Grant will be a major treat for convention delegates. The famous Grant's Farm is operated as a sight-seeing attraction by the Anheuser-Busch Company.



Fame is housed in the Stadium, and visits here may be arranged to see items from the days of the famous Gas House Gang and Stan the Man Musial to the present time.

A tour of Grant's Farm, the old log cabin home of President (and General) Ulysess S. Grant; and now owned and operated by Anheuser-Busch, is already planned and scheduled. On and around the farm, wild deer and buffalo roam. A diesel powered train takes you through the grounds to see this. Half way, a stop is made at the Dutch styled house and stables. Here light refreshments and soda may be purchased and you may drink all of the Busch beer you can hold; free. There is a children's zoo where the animals may be petted and fed. A trained elephant and bird show is given free of charge. Then back to the entrance and a visit through the famous Clydesdale stables. This will be a never-to-be forgotten experience for young and old alike. Don't miss it; and St. Louis is the only place you can see it.

Send in your reservations now. Hotel (motel) rooms are limited for the special price. Don't be left out.

Watch for the April issue of Electronic Service Dealer for still more interesting events we have planned for you when you come to "Surprising St. Louis" next July. We will then also include schedule of Special Events planned and cost of each.

Make the Annual NEA Convention your vacation for the entire family.

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National Service Conference And AIEA Convention Draws Hundreds

70 persons from the country's service associations, manufacturing, test equipment, trade publications, and educational institutions met for the third National Service Conference in Peoria, at the Ramada Inn.

Most important was that NARDA, NEA, EIA, and individual associations and companies were able to sit down and discuss the problems of the industry and come away with a positive approach to reaching solutions. The eight committees met Feb. 5 in the morning and from 8 to 12 people participated on each. Each committee discussed the topic assigned and in the afternoon presented their report to the entire body. At that time various suggestions were made by individuals.

At the NEA board of Directors meeting Feb. 6-7, the finances of NEA were presented by Warren Baker and Dick Glass. The past quarter's report covering August, September and July was covered in detail due to that quarter's report having some transfer errors. The updated report was approved unanimously as was the October, November December second quarter report.

The proposed CET society was discussed at length by the good representation at Peoria. The official committee report suggested that the society be formed apart from NEA. However, at the board meeting proper, the subject was put in committee to work out details that would allow each state to have a voice in approving ISCET memberships, and to work out any other details before the Lake Charles May 15-16 meeting, where it was assumed NEA approval would take place.

Speakers for the various dinner functions were outstanding for this meeting: Thursday luncheon featured Mr. Eugene Hill, representing the National Association of Broadcasters. Mr. Hill is employed with Kaiser Broadcasting in San Francisco. He pointed out the present problems with UHF broadcasting and suggested that Service-Manufacturers and Broadcasters form a special committee on the national level to work on mutual problems of the industry. A special

The newly elected officers of the AIEA are shown above. Left to right are: (front row) George Sopocko, CET, V.P.; John Stoll, Secretary; Bob Finnegan, CET, Treasurer. Back row: Stan Byerly, CET; Ron Broyles, CET; Bill Sutman, CET; Phil Kidd, CET and Bill Fey, CET, all newly elected members of the board of directors.

meeting was held Thursday eveing to work further on this problem.

Mr. J. W. Williams, Jr., executive director of the Texas Electronics Assn., spoke at the Friday Luncheon MCed by Larry Schmitt of California. Ron Crow, supervisor of electronics training at Iowa State University was the Saturday evening speaker, and that function was MCed by Harold Frutchey of Canton, Ohio. The Saturday evening banquet was attended by several of the NEA board members although it was primarily for the Illinois State Assn. At that function, Mr. M.L. Finneburgh, Sr. gave his stirring talk on the future belongs to those who prepare for it. The reception line existed for nearly half an hour after his talk which ended with a standing ovation. Mr. Ben Clous of Clous Distributing in Peoria also attended for this feature.

The organizational meeting of the ARTS'/Illinois Electronics Association, Inc. was a total success. Groups from Peoria, Bloomington, Decatur, Kankakee, Rantoul, Springfield, Belleville, and elsewhere came together to form a real good looking state organization. Mr. Bob Griffin, CET of Bloomington was elected president, Mr. Geo. Sopocko, CET of Chicago, was elected Vice Pres., Bob Finnegan, CET of Bloomington was elected Treasurer, and John Stoll of Peoria was elected Secretary. Directors were elected from the four quadrants of the state, a constitution was approved, and the next meeting set for April 19 in Bloomington. It looks like Illinois will have a strong state organization and will be one of NEA's strongest affiliates.

The TV stations in Peoria gave good coverage to the meetings, spending most of their time on John Jage's fire and smoke report news. The local newspapers also covered the different activities of the meetings each day, and even the London, England BBC station took an interview concerning the fire and smoke product safety committee action of the National Service Conference.

Nearly 200 people attended the various meetings held in Peoria, and all reports seemed to indicate that the series was the most important ever held concerning electronics service.



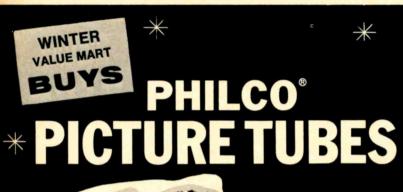
The presentation of new CET certificates was a major highlight of the recent AIEA Convention in Peoria. Pictured above are: (Front row) Buster Andrews, Kenneth Garber and Art Christopher. In the back row are: Bill Chamberlain, Richard Hoffmeister, Harold Hillerts and W.R. Morrison.

MARCH, 1970

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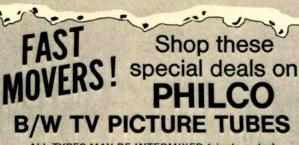
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The finest quality materials and craftsmanship go into every picture tube that comes out of this plant. Philco-Ford's new Lansdale facility includes the most advanced production methods and controls available for making a top performance color picture tube in high volume—to the highest standards of quality.

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ELECTRONIC service dealer

CALIFORNIA SECTION

CSEA president's report

By VIRGIL GAITHER



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CURSED, KICKED

&

ABUSED!

Question: What is it that will blind you — will corrupt your children — will give you cancer — will burn your house down? Why, of course, it's your color TV!

It is puzzling why one of man's truly great inventions has been so maligned and kicked about. Mr. Average sits in the comfort of his own living room and enjoys sportscasts, drama, news, theatre, movies, travelogues, educational films, the list of entertainment is endless. This bonanza would have been beyond the wildest dreams of his grandfathers.

Could it be that this is the root of the problem? A mass inferiority complex. Our ancestors before us did not have TV so maybe we don't deserve it; hence, the constant harassment — it is an interesting thought.

Regardless of the cause, it remains a

fact that the do-gooders, the bleeding hearts, and the political hucksters continue to tear our business apart and they feed the flames of this hysteria. Many officials in government and numbers of consumer activists act on the basis of emotion and prejudice. They jump to a number of unwarranted assumptions — the news media accepts these same assumptions and highly publicize them. It is a false assumption that the consumer should expect instant and unqualified protection in the market place.

It would be nice if these people would change their attack to some other product or service, maybe vacuum cleaners or sewing machines or could I suggest they investigate and look into the lowly toilet seat. While they are investigating and looking into it we could all pull the chain.

CSEA news wire



RALPH JOHONNOT, CSEA Executive Director

First CSEA Leadership Seminar Hailed as Success

On Thursday, February 12, the chapter officers, delgates, and directors met jointly from both Zones A and B for a one-day leadership training session in San Francisco. Representatives from Alameda, Diablo, Marin, Richmond, San Francisco, San Mateo, Santa Clara, Sonoma, Napa, Ukiah, Sacramento, and Superior listened intently to the eight hour lecture and workshop presented by Mr. A.R. Lawrence and Ralph Johonnot, State Executive Vice President. At the conclusion of the seminar each chapter representative evaluated the conference. All were in agreement that it was one of the finest endeavors CSEA has undertaken.

By the time of publication, the following zones will also have held similar seminars: Zone D, February 21 in Redlands; Zone G, February 24 in San Diego; and Zone F, February 25 in Los Angeles. Reports from each will follow.

Zone B Officers



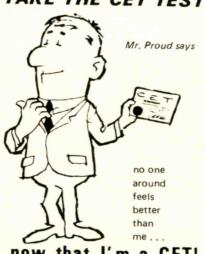
Zone B officers elected in January are shown above from left to right: Claude Schwarz, Secretary Treasurer; Mike Littleton, Vice Chairman; Al Zitterkoph, Chairman; and executive secretaries Ralph and Gladine Hoy. Monthly each chapter of CSEA sends their elected delegate to a meeting called the zone council. At this meeting various programs are instituted and communications from chapter to chapter are accomplished.

Workmen's Compensation Checks Mailed



Another first for the CSEA! Bob Ryan, our insurance consultant is shown handing Miles Sterling, President of Electro TV in Garden Grove, his first dividend check in our Workmen's Compensation Group. This divident of 20 percent is being paid this month to all members of CSEA who paid over \$100 in premiums in the group during the first year, ending April 1, 1969. Gene Munson, our faithful Ryan Company man, shown on the right. informs us that any member who does not enroll in the group is just plain over-paying for his Workmen's Compensation Insurance.

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now that I'm a CET!
Certified Electronic Technician

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Interchangeability Guide

| cture ube w In ceiver | Replace With GE Type | Notes | Picture Tube Now In Receiver | Replace With GE Type | Notes |
|--------------------------------|----------------------------|-------|---------------------------------------|----------------------------|-------|
| 229 | 11SP22⊖ | | 22QP22 | 22QP22 | D |
| 222⊖ | 11WP22⊖ | | 22RP22 | 22RP22 | D |
| 220 | 15LP22⊖ | - | 22SP22 | 22SP22 | D |
| 222⊖ | 15MP22⊖ | | 22YP22 | 22YP22 | D |
| 229 | 15NP22⊖ | | 23EGP22® | 23EGP22 ^① | |
| P22⊖ | 19EXP22⊖ | | 23EGP22A⊖ | 23EGP22A | |
| 'P22⊖ | 19EYP22⊖ | | 25AP22 | 25AP22 | D |
| 1P22 | 19FMP22 | D | 25AP22A⊖ | 25AP22A⊖ | |
| P22 | 19FXP22 | D | 25BP22 | 25BP22 | D |
| .P22 | 19GLP22 | D | 25BP22A⊖ | 25BP22A⊖ | |
| /P22 | 19GVP22 | В | 25CP22⊖ | 25CP22⊖ | |
| NP22 | 19GWP22 | В | A25CP22 | A25CP22 | D |
| (P22 | 19GXP22 | в-с | 25FP22,A | 25FP22,A | D |
| /P22 | 19GYP22 | С | 25GP22,A | 25GP22,A | D |
| ZP22 | 19GZP22 | D | 25RP22 | 25RP22 | D |
| (P22A® | 21AXP22A® | | 25SP22 | 25SP22 | D |
| (P22A □ | 21CYP22A® | | 25UP22⊖ | 25UP22⊖ | |
| 3P22 ⊕ | 21FBP22 □ | | 25VP22 | 25VP22 | D |
| 3P22A⊖ | 21FBP22A⊖ | | 25WP22 | 25WP22 | D |
| P22 ® | 21FJP22 [□] | | 25XP22 | 25XP22 | В |
| IP22A⊖ | 21FJP22A⊖ | | 25YP22 | 25YP22 | В |
| (P22,A | 21FKP22,A | D | 25ZP22 | 25ZP22 | D |
| FP22⊖ | 21GFP22⊖ | | 490EB22 | 490EB22 | B-C |
| WP22⊖ | 21GWP22⊖ | | 490FB22 | 490FB22 | B-C |
| BP22 | 22ABP22 | D | 490GB22 | 490GB22 | B-C |
| 222⊖ | 22JP22⊖ | | 490HB22 | 490HB22 | B-C |
| P22⊖ | 22KP22⊖ | | 490JB22 | 490JB22 | B-C |
| P22 | 22LP22 | D | 490KB22 | 490KB22 | в-с |
| | | | | | |

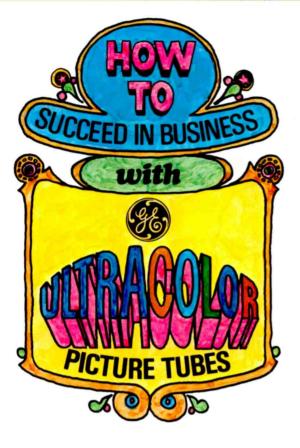
NOTES

- B It may be necessary to reverse the red and green cathode leads at socket to achieve proper white balance.
- C For some receivers, it may be necessary to modify the yoke mounting fixture to allow proper location of other neck components. In a few extreme cases, substitutions may not be feasible.
- D Direct replacement.
- Sulfide Phosphor
- ⊕ Rare Earth Phosphor

TUBE DEPARTMENT - OWENSBORO, KENTUCKY







Ultracolor by General Electric offers the solution to the complex problem of replacement color picture tube selection. One high quality line, and only one line, makes it possible for you to confidently recommend the right tube every time.

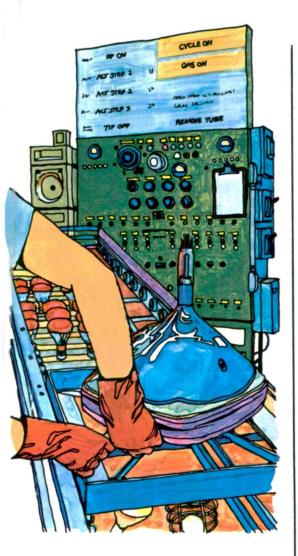
Ultracolor relieves you of the timeconsuming chore of educating each customer about rebuilt, re-gunned, re-screened, new, second quality or first quality replacement tubes. It makes your job easier and faster.

In this booklet you'll discover how the simplicity of the Ultracolor line keeps customers pleased with your products and services.



Ultracolor makes your CRT replacement selection easy

When you recommend Ultracolor for a color picture tube replacement, you eliminate the multiple choice problem. You quote only one price, and have complete control of the situation. You're an expert who thoroughly understands the economics of his business



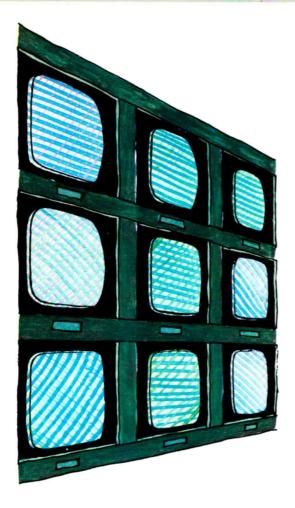
Top quality manufacturing produces tubes worthy of the name "Ultracolor"

Technicians and craftsmen patiently build quality into Ultracolor tubes. Hand working achieves the best results in some manufacturing operations. Others require automated cycle/timed equipment. It takes more than a week to produce and check the Ultracolor tube you proudly recommend to your customers.



Rigid quality control tests assure top performance

An Ultracolor tube undergoes more than 50 quality control and performance tests during its manufacturing cycle. If, at any stage in the manufacturing process, the tube fails any of its tests, it is rejected. Thorough testing such as this gives you assurance you are installing quality when you replace with Ultracolor.



Hundreds of operation hours confirm Ultracolor life expectancy

Week after week, selected Ultracolor tubes faithfully perform during their grueling life test. Periodic checks confirm the tube's ability to withstand service far beyond average use. The constant glow of color indicates that indeed Ultracolor tube-life expectancy is long and brilliant. Patient tests such as these mean you can recommend Ultracolor as a proven performer; one that you know will satisfy your customer.

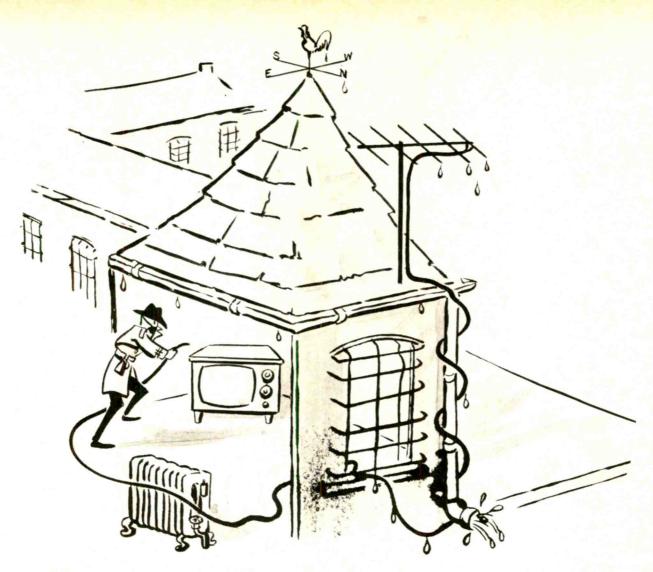


Reliable GE one-year warranty gives your customers confidence

Your customers recognize this famous General Electric warranty. They know GE stands ready to back it up. This confidence makes your recommendation of Ultracolor readily acceptable. The Ultracolor warranty states that the tubes will perform well for a minimum of one year or be replaced free of charge. This reliable warranty combined with the modest price gives your customers an unmatchable purchase.

Some of the reasons why selecting Ultracolor makes your picture tube replacements easier

- EASIER TO SPECIFY
- TOP QUALITY TUBE
- IMMEDIATE AVAILABILITY
- RESPECTED BRAND NAME
- RELIABLE GE WARRANTY
- CLEAR BRILLIANT PICTURE
- BEST DOLLAR VALUE



transmission IMPOSSIBLE

Your mission . . . lead a VHF transmission line along a drainpipe, through a window and behind a radiator without having the picture self-destruct. You look in your file and summon the all-weather high performance transmission lead that handles impossible missions . . . newly engineered Channel Master 300 OHM SPECTROHM

Channel Master SPECTROHM protects a greater portion of the electrical field to give you a cleaner, sharper picture—even under impossible conditions. Our agents tested SPECTROHM against ordinary flat twin lead under drench conditions, and

then gave them the squeeze-torture test. Here's how they compare:

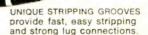
In the drizzly gloom at VHF 13, ordinary wire loses almost twice as much as SPECTROHM. At UHF 80, ordinary wire losses are 50% greater than SPECTROHM.

Under murderous squeeze conditions, SPECTROHM'S loss is 90% less than ordinary wire.

So remember . . . whenever laying lines poses intrigue, now there's a transmission impossible line.

300 OHM SPECTROHM new from CHANNEL MASTER

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The Professional Way to Service TV Tuners

by Tony Ferris

Tuners Inc. does not deal with the public. We are strictly "technicians' technicians", solving the really tough servicing problems that it doesn't pay the average man in the field to tackle. We handle all kinds of TV work but, as our name implies, we specialize in tuners. This article will tell you how to cure tuner troubles rapidly — and profitably.



Types of Tuner Troubles

The following symptoms may be caused by a defective tuner: (1) snowy picture; (2) streaking or flashing in picture; (3) loss of sound and picture; (4) loss of certain channels; (5) picture pulling or distortion; (6) partial blanking of raster.

If you suspect tuner trouble, try the following approach:

1. Clean and Degrease Contacts with Tun-O-Wash

In servicing tuners, it's important to start with clean contacts. Poor contacts cause at least 70% of all tuner troubles. In fact, we get many tuners in for repair that need nothing more than a thorough cleaning.



Chemtronics TUN-O-WASH is excellent for this purpose. It's almost like an ultrasonic bath in a can. Use this high pressure degreasing spray on all tuner contacts. Be sure to remove the tubes and spray the sockets thoroughly, to remove corrosion.

A thorough cleaning will often eliminate intermittents and restore tuner alignment.

2. Lubricate and Protect Contacts with Tun-O-Foam

After the tuner has been flushed out with TUN-O-WASH, let it dry thoroughly. Then, respray all contacts (including tube sockets) with TUN-O-FOAM. Once the TUN-O-FOAM has been applied, rotate the channel selector through all channels several times. Also, work the tubes in and out of their sockets several times. This will spread the lubricant to all critical surfaces.



You will find that a thorough cleaning and lubrication will clear up about 70% of the tuner troubles you encounter (aside from tubes, which should always be checked by substitution before any servicing is attempted).

What's more, the TUN-0-FOAM protects contacts from future corrosion, provides excellent

lubricity for smooth operation, and continues to clean and lubricate contacts each time the channel is changed.

Most important, neither TUN-O-WASH nor TUN-O-FOAM attack plastics or cause detuning. This is vital, since a spray that detunes a color set almost always results in a profit-consuming callback.

Isolate the Trouble to the Tuner

If a thorough cleaning and lubrication (which takes only a moment) fails to restore proper operation, you will have to start troubleshooting. But before you start tearing into the circuit, make sure it's the tuner that's at fault.

IF and AGC defects often look an awful lot like tuner troubles.

If the picture is snowy, for example, too much AGC voltage may be the problem. To check this out, simply short the AGC test point to ground. This makes AGC voltage zero, permitting the RF amplifier to operate at full gain.

Next, check out the IF stages. Start with a good TV set connected to a good antenna. Connect the IF cable from the tuner of the known good receiver to the IF input of the set you are troubleshooting, if you get a good picture with the substitute tuner, you know you have tuner trouble. Otherwise, it's a chassis problem.

The 10 Minute Tuner Check

Once you have cleaned and lubricated the tuner and made sure that it is really the trouble source, give it a 10 minute check. Discipline yourself **not** to spend too much time tracking down tuner trouble. If you can't spot the trouble in 10 minutes, it may take you hours. Therefore you're a lot better off to send the tuner to a professional rebuilder. But the 10 minute check will reveal many tuner troubles.

If your preliminary checks revealed a shorted or gassy tube, chances are that excessive current has damaged a resistor. Burned resistors, of course, are fairly easy to spot.

After a brief visual inspection, make voltage checks at the test points provided. B+ voltage should be accurate $\pm 20\%$. Then, use a test socket to make voltage and resistance checks at tube pins. If you read a low plate or screen voltage, this generally indicates that a series resistor has changed value or a capacitor has shorted.

Check to see if the oscillator is working by measuring the mixer grid test point voltage. A dead oscillator is often caused by the plate load resistor.

Be sure to check the balun. Defective baluns often cause snow or loss of certain channels. Your ohmeter will generally spot balun troubles.

One final word of advice: Treat all tuners carefully. Don't poke around in coils or you'll cause misalignment. Replace defective parts carefully with exact replacements. If you do have to send the tuner in, mark all leads clearly, keep the brackets in a safe place, wrap the tubes well and pack them carefully with the tuner.

Follow these simple rules and you'll make money on tuner repairs, whether you spot the trouble yourself or send the tuner to a specialist. Reprinted from the Orange County Bear Facts

PT ANNOUNCES YELLOW PAGES REDUCTION

Pacific Telephone has made it definite. There will be a reduction in the number of Yellow Pages headings for the TV & HiFi industry.

Mr. W. C. Henderson, General Director Sales Supervisor, announced from his San Francisco headquarters office that within the next few months the TV & Radio Dealers and the TV & Radio Repairing & Parts headings will be combined into one called TV & Radio Dealers & Service. A similar combination will be made of the sales and service headings in the Hi Fidelity section.

Pacific Telephone's decision came after preparing a survey for the National Heading Study Group on this subject. Decisions of the other phone companies outside of California were mixed. Some will be done as Pacific Telephone has done with others have limited their decision by only combining TV with Radio (which Pacific Telephone has been doing for years) but not to combine sales with service. More detailed facts will follow in a later article in this publication and in the National Magazines.

Pacific Telephone's move means a breakthrough for both the users of the directory and for the California members of this industry. After the changeover, the public will no longer be confused with essentially duplicate headings. The user will be able to find our firms more easily and the California firms will no longer be forced into duplicate or double advertising.

Date of Changeover!

Pacific Telephone has not yet set firm dates for combining headings. Changes within a company as large as Pacific Telephone take tremendous logistics. Because of the necessary delay, the upcoming Los Angeles Centeral directory will not combine the headings. The changeover for that directory will not come until at least the 1971 edition. Orange County may or may not see the combining of headings in 1970. The decision for this year's OC directory is expected very soon. When we hear, it will be reported in Bear Facts.

Last month the names of newly elected chapter officers appeared. Last minute returns are as follows:

Glendale Burbank — Bob Walters, President; Don Cheeseman, Vice President; Art Hirahara, Secretary; James Scarborough, Treasurer and Delegate.

Orange County - Stan Berko, President; Henry Oviatt, Vice President; Ed Wineberg, Secretary; Bob Cook, Treasurer; Jack Mitchell, Delegate.

San Gabriel – John Armstrong, President; Lionel Woolery, Vice President; Al Cortez, Secretary; L.O. Ashmore, Treasurer; Lionel Woolery, Delegate.

Diablo – Douglas L. Knauf, President; Al Norwood, Vice President; Jack Warnecke, Secretary and Treasurer; Mike Littleton, Delegate.

Los Angeles - Sid Getler, President; Ed Simon, Vice President; Don Jackson, Secretary; John Calhoun, Treasurer; Roy Murphy, Delegate.

Northern California Auto Radio Dealers Assn — Stan McKay, President; Russell Moe, Vice President; Jean McKay, Secretary; Wes Keys, Treasurer and Delegate.

Riverside — Mike Martynez, President; Wade Nelson, Vice President; Art Becker, Secretary and Treasurer, Harry Graham, Delegate.

Pomona – Dean Dresp, President; Ken Middleton, Vice President; Rick Siebert, Secretary and Treasurer; George Campbell, Delegate.

Pasadena – Tom Sawkins, President; Ed Burroughs, Vice President; Frank Fisher, Secretary; Bud Murray, Treasurer; Bill Lawler, Delegate.

San Mateo – John Stahlman, President; Loren Canino, Vice President; Ken Deedler, Secretary and Treasurer, Harry Graham, Delegate.

Latest California CET's

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| 485 Smith, L | |
| 486 Charlton, L | Long Beach |
| 487 Simon, Ed | |
| 488 Ishii, T | |
| 489 Straus, H | |
| 490 Murphy, R | |
| 491 Butler, C | |
| 492 Surette, D | Carmichael |
| 493 Griffith, R | |
| 494 Moates, R | Sacramento |
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| 503 Garabedian, Peter | San Francisco |
| 504 Zinn, Edward D. Jr | Pacifica |
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| 507 Romo, J | Pomona |
| 508 Hornbaker, Melvin L | Montclair |
| 509 Schmitt, Lawrence | San Bruno |
| 510 Dexter, Oakley W | Larkspur |
| 511 Jenkins, Thomas | |
| 512 Latimer, Donald H | San Diego |
| 513 Hillis, James W | |
| 514 Rickley, Michael | Fairfield |
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| 516 Weimer, Robert A | Fairfield |
| 517 Moran, Paul | |
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| | |

CET TESTS NOW AVAILABLE IN SPANISH

California CET's Reach the 500 mark — see article in National Section. Listed below are the latest card holders.

Application For Membership CALIFORNIA STATE ELECTRONICS ASSOCIATION 13666 S. Hawthorne Blvd., Hawthrone, Calif. 90250 Phone (213) 772-5028 FIRM NAME Owner's Name Business Address State Resale Permit No. City State Refistration No. Phone Number 7ip Code Single Ownership. If partnership or corporation, name partners or officers Number of years in Radio and/or I.V. business Partnership Corporation.

TAX, INSURANCE &

INVESTMENT

TIPS

BY

RYAN



ROBERT J. RYAN

"WHAT IS AN AVERAGE CLAUSE IN YOUR FIRE INSURANCE POLICY?"

Very simply stated, it's a fair agreement between you and the insurance company, that if you will carry insurance to an agreed value, they will give you a lower rate. You don't sign this agreement, but, by accepting the policy, you agree to it.

What's the danger in an average clause?

Only the danger that you might not understand it — or, that your policy has not been kept current with your inventory, building, customers goods and equipment.

Shop X started business in 1965. His insurance, written when he first opened up, and renewed by 'mail' set his values at \$20,000 with a 90% average clause. If he has a total loss, they will pay \$20,000.

But — he now has \$10,000 in total values, and he has a fire that destroys \$10,000 of those values — equipment, stock, etc. His insurance company is going to say "You have violated your agreement to carry insurance up to 90% of your value, therefore we will pay you 20/36ths of your loss, or about \$5,000." Wouldn't this make your savings in premium look like 'chicken feed'?

So, either keep your insurance up to value — or eliminate the average clause.

Another important question — How is your liability insurance written? What limits? Do you have 3 or 4 different limits, such as \$25,000 on premises liability — and \$5,000 limit on property damage?

Why not a Comprehensive Liability policy for \$300,000 single limit — any claim for which you might be legally liable? Let your insurance company furnish your legal defense — the difference in cost is relatively small. If so meone files a suit against your for \$100,000 in an injury, the cost of defense might frighten you — even if you're in the right.

There are not light matters. Call your Association office and have your Association brokers give you expert counselling in these vital insurance area.

Robert J. Ryan Company

422 South Western Avenue Los Angeles, California 90005 386-8651



HOOSIER TEST PROBE

A SPECIAL ESD FEATURE

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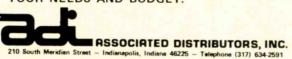
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Rugged Cycolac insulators add strength

Rugged Cycolac insulators add strength in supplied strength in strength in supplied in the strength in the supplied with a UHF/FHF frequency splitter. And the list prices range from \$17.96 to \$79.96. There's no better performance per dollar than this—anywhere.

We have the complete line of JERROLD ANTENNAS IN STOCK . . . ONE TO FIT YOUR NEEDS AND BUDGET.



The "Terrible Trio" has struck again! Charles Cave, NEA Director of training; Clem Raffauf, Zenith Distrb. Service Mgr., and O.C. Brown, IESA Vice President, made another Apprenticeship Missionary venture to North High School, Evansville, Indiana to lay the groundwork for the education, care and feeding of a future crop of Electronic Technicians.

Mr. Raffauf presented two Zenith color chassis, complete with picture tube and mounting hardware, to the Electronics Educational Dept. of North High. Accepting for the school Was David Risley, Electronics instructor.



Those participating in this happy venture in Evansville were, from left to right in photo: Charles Wilhelm, Bob Smith, Dave Risley, O.C. Brown, Charles Cave, Clem Raffauf, and Donald Brack.



While attending the NEA Board meeting in Peoria, Ill., yours truly had the double honor of giving the CET exam to Mr. Don Pinkston, NATESA Secretary and formally congratulating him at the board meeting the following day after he successfully passed his exam. A dedicated 'Oakie' and a fine gentleman is now CET Ok-1. A seed has been planted in fertile soil! Color it excellent — the National Service Conference, NEA Board Meeting and Illinois Elect. Assn. Convention. A good way to fly!



ELECTRONIC service dealer

IOWA BEACON

IOWA president's report

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by CLARK POHL



TSA BOARD ACTION REVIEWED

Having just completed our first board meeting for the new year, TSA Iowa has great hopes of gaining back our strength of years back. Many things are now on our side. Several new names are appearing on our roster with as many new ideas. We are happy to report our investment and savings program has been enthusiastically accepted, with members signing up as fast as the representative can call on them. The same goes for the first contracts made on the group insurance plan. The insurance committee is investigating still another plan which could save members up to 25% on workmen's compensation and liability insurance. This is the same company and plan that Texas Electronic Association carries and they reported a 31% savings last year. In many cases it saved more than enough to pay association dues. This is just one plan, think of what you could gain is you used several of the plans offered by TSA.

Our biggest project of the year, the annual convention is set for April 18-19 in Des Moines. After hearing the convention report, from Bill Gulliver, convention chairman and Les Buchan, executive secretary, everyone should plan to attend. Bill said with manufacturers, distributors, educators, etc., on hand Friday night to answer our questions and give us some facts on products, service, or anything of interest we should be reminded of the good old days. We hope distributors are back with their usual hospitality for all. Saturday will be our business meeting, speakers, and banquet. Watch for complete details next month.

We hope to solve another problem for not getting new members this very month if it hasn't already happened.

(Continued on next page)

Word has been received that many dealers haven't been asked to join TSA. February and March should find most dealers being contacted by several possible sources: 1. insurance people, 2. investment and savings people; 3. distributor personnel; 4. I.C. collection system has a man back on the road; 5. another member should be knocking on your door. If you are missed by the first five chances the door is always open at a member shop and the mail goes six days a week to the TSA office in Waterloo. No excuses, join today.

IOWA NEWS NOTES

Homer Davidson, Financial Director of The National Electronics Associations. Consumer Electronic Technician in the Fort Dodge area and author of numerous technical articles, has written a very practical book entitled Servicing the Solid State Chassis. There are twelve chapters in

the book all titled by the type of equipment discussed. Diagrams, pictures and waveforms accompany the text material illustrating points of interest with extreme clarity. Many case histories are included. The book is published by TAB and is available from most distributors.

Do you suppose there is a new picture of Bob Lewis around, I think the building he is in has been leveled, in fact I know it has been. Give Pete a new picture.

TSA Convention in Des Moines sounds like it will be great, I was downtown a few days ago and they told me so. Ask Bill Gulliver!

Check the picture of Clark Pohl, looks like Saturday morning in Waterloo – a couple of years ago, and then printed and reprinted. Hasn't there been a recent one taken.

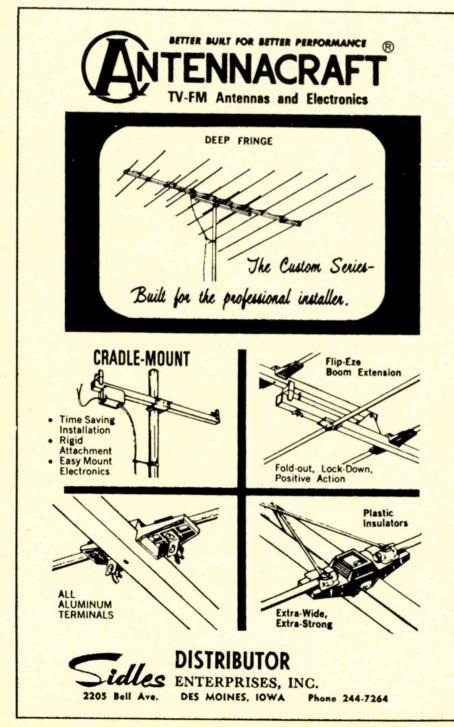
Those Drake Bulldogs are at it again

– at this time 11-1 in the Conference.

Jack Betz is still working extremely hard for NEA. The work he does on the public relations booklets is fantastic and they should be used by every service dealer in the country. A free sample of each, along with a price list, is available from Jack. Just write him at 2525 W. 4th St., Waterloo, Iowa 50701.



Ron Crow, CET, who is the instructorsupervisor of the Electronic Division of Iowa State University is shown here as he addressed the Friday evening dinner meeting of NEA in Peoria. ISU is doing a great job of training electronic technicians and has worked very close with the Iowa association.



Stop in, I am available for comment between 11:00 PM and 2:00 AM most any day, I love to visit, let's hear your side.

Sorry, I missed Peoria.

The Vilimek's are still enjoying their new building.

Thought I would have heard from back EAST – I mentioned we saw White's picture in the ESD. Let's hear from you Whitey Bowstead.

Write your comments to me, my new address is 1229 25th St., Des Moines, Ia 50311. I am sure I won't answer them. See you at the Convention, suppose Lysle will be here, old Shanfelt himself, wouldn't be the same without him aboard.

I see by the newspapers that TV sets are now being labeled as a "fire hazard." I suppose that you are right now answering customers inquiries on this "hazard." According to Wilbur Johnson in the State Fire Marshall's office approximately 12 to 15 fires in 1967-68 were caused in Iowa by TV sets. For the same period there were some 8,000 fires from all causes. By a quick calculation then, TV's have accounted for about 0.187% of the 1967-68 fires!





Clark Pohl recently expanded his operation with the addition of a second story to his existing building. Now, all show rooms are on the first floor and they have included a stereo center in one half of the second floor along with the offices. Both TV and appliance service sections are new with the TV service area completely carpeted and air conditioned. Both service areas are at dock height for unloading appliances without lifting. Pictured above is the original building and the second shot shows how the addition was accomplished.



TSA - IOWA
CONVENTION
APRIL 17-18-19th

WHERE -

National Motor Inn

IN

DES MOINES

Featuring Friday Night
Buffet, Saturday Luncheon
and Saturday Night Banquet
YOU ALL INVITED

MARCH, 1970 21

KANSAS ELECTRONIC ASSOCIATION Your & to reliable service

KEA NOTES

A SPECIAL ESD FEATURE

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Bill Winegar

SECRETARY

John Farrell

TREASURER

Wilford Carden

SERGEANT-AT-ARMS

Keith Nicholson



Six new CETs received their certificates at the regular meeting of the Wichita chapter meeting.



Mr. John Mileham, promotion director for KTUH-TV of Wichita & Hutchinson is shown receiving a plaque from KEA for their fine cooperation with the other segments of the TV industry. Mr. Emmitt Hughes, president of KEA presented the plaque at the regular Wichita Chapter meeting.

SELECTED HIGH VOLUME,

ATTRACTIVE PACKAGING

LOW PRICED ITEMS

KEA President's Report





Plans for the KEA State convention are shaping up and it looks as if we will have another fine convention this year. The program and registration should be out in the near future. Don't forget the dates, April 24, 25 and 26, 1970. The next board meeting will be held in Wichita, March 15, 1970, everyone is urged to attend.

We are adding CETs to our list each month and hope by convention time we will have doubled our CETs in one year.

The or-organized Mid-Plains chapter has added another new member, also the Hutchinson, McPherson, Newton chapter has added another member and has three more shops talking membership.

Lauren Matson and wife, Wilford Carden, Larry Premer, John Farrell, myself and my wife attended the Peoria, Ill. meeting. The people of Illinois were most gracious to those of us from out of state. We would like to extend an invitation to the people of Illinois to come and take part in our state convention at the Broadview Hotel in Wichita, Kansas. We would like to congratulate Illinois for forming a state organization and taking part in NEA. I am sure that we will be good for each other.

One of the highlights of the meeting had to be the talk by Mr. M.L. Finneburg. How this man can give talk after talk after talk and still be an inspiration to those who have heard him many times, I do not know. I do know that the trip from Hutchinson Kansas to Peoria was more than worth the cost just to hear "M.L." again.

INCREASE STORE TRAFFIC AND PROFITS HANDY ELECTRONICS

MERCHANDISERS DISTRIBUTED IN KANSAS BY

RADIO SUPPLY COMPANY

ELECTRONIC RS COMPONENTS

HAVE A "MINI" SUPERMARKET FOR TV, HI FI, STEREO, TAPE ACCESSORIES IN YOUR STORE



the KETA news

Kentucky Electronic Technicians Association

Kentucky Electronic Technicans Association

FRED B. WATJEN Louisville, Kentucky President

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

JOE SMILEY Louisville, Kentucky Recording Secretary

ED KIMMEL Louisville, Kentucky Corresponding Secretary

FRANK WILDER Louisville, Kentucky Sergeant-at-Arms

The KETA Convention is open to anyone interested in the electronic world of today.

This is our invitation to the third annual convention to be held in Lexington, which is about eighty miles

president's report



By FRED B. WATJEN, CET

east of Louisville with good air and rail connections. Where in the world can you get four meals and eight hours of instructions on electronic gear for the registrajon price of \$19.95?

Refer to our schedule of events and don't miss the opportunity to gain more knowledge and upgrade the profession of the radio-TV technician.

Meals have to be contracted for so get your reservation in early,

For those of you from out of state who have not seen the Lexington area, take an extra day to visit this part of our country. The rolling blue grass fields of the horse farms are one beautiful sight, with white fences stretching for miles. I have been in England and heard them rave about the country around the village of Broadway in the Cotswalk Country and here in Kentucky we have the same type of countryside.

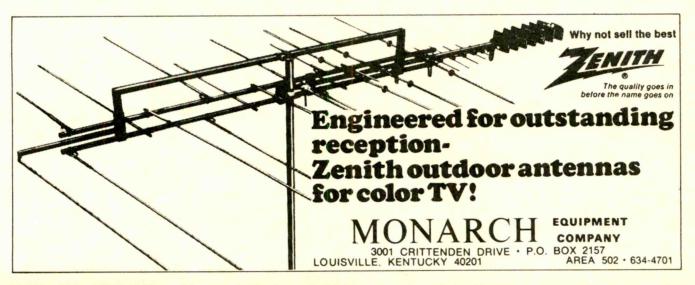
The University of Kentucky located in Lexington would be well worth the time to tour. Lexington business and shopping areas are very good.

Take a day out and see!

Reservations must be in by Wednesday, March 18, 1970 to:

Fred B. Watjen, 3628 Brownsboro Road, Louisville, Kentucky 40207 or

Continental Inn, 801 New Circle Road N.E., Lexington, Kentucky 40505.



for spring fun

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





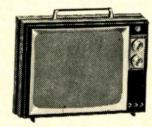
Sylvania's 102 square inch screen personal portable color TV. Has convenient carrying handle and built-in VHF and UHF antennas. AFC (automatic fine tuning) insures a perfect picture with the push of a button. Sylvania portable color television Ask for model CB35.



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.

> 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 carrying case,





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 entertainment \$129.95. Ask for model MY74,

Sylvania DISTRIBUTOR Cooper Louisville Co.

118E. Main St. 502-582-1686 Louisville, Ky.

Color Television Training Sessions

KETA Convention

Kentucky Electronic Technician Association 1970 third annual convention will be held in the world famous Race Horse and Blue Grass Country.

Place - The Luxurious Continental Inn, 801 New Circle Road, N.E., Lexington, Kentucky 40505 -Phone: (606) 299-5281 – "Bring your Swim Suit"

DON'T MISS THIS OPPORTUNITY TO PARTICIPATE IN PROGRAMS DESIGNED TO UPGRADE YOUR PROFESSION - DON'T MISS THIS OPPORTUNITY TO GAIN MORE KNOWLEDGE OF PRODUCTS YOU SELL OR SERVICE.

The agenda includes - Registration, Friday, the twentieth 9 am to 12 - Lunch 12 to 1:30 pm.

RCA – Technical Training Meeting, distributor, Collins Company, Mr. H.E. Apley, 1:30 to 3:30.

Admiral - Technical Training meeting, distributor, Stratton and Terstegge, Mr. Cooper Coleman, 3:30 to 5:30.

Sylvania Technical Training Meeting, distributor, Cooper-Louisville, Mr. Sam Milillo, field engineer, 8:00 pm to 10:00 pm.

Saturday, March 21

KETA Meeting - 9:00 to 12. Election of officers plus reports on CET – apprenticeship and training – technical training programs and many others. Don't miss this meeting, help direct programs that are moving the independent dealer and the service industry forward.

Continental Casualty Company - Group Insurance Benefits - Mr. Buford Wooten 2 pm to 2:30 pm.

Zentih Technical Training Meeting - Distributor -Monarch Equipment Company, Mr. Clement Raffauf 2:20 to 4:00 pm.

I.C. System, Inc. - Delinquent Accounts, Mr. William Planche 4:00 pm to 4:30 pm.

Educational Training Programs and What's in the future - Mr. Charles Cave, NEA Director of Training, 4:30 to 5:30 pm.

Cocktail hour 6:30 to 7:30 pm.

Dinner 8:00 pm. Keynote speaker.

Craig eliminates all the reasons you've ever had for not buying a car stereo.

\$ 11995

We've made it as hard as possible for you not to buy our new car stereo. We mounted it on the floor so you couldn't complain about it looking out of place. Then we put an intricate magnetic lock on it so you couldn't complain about it being stolen.



3123 The Craig floor-mounted, burglar-proof car stere

We designed the face at an angle so you couldn't complain about taking your eyes off the road to load tapes. Finally we priced it so you couldn't complain about the price. The Craig Floor-mounted, Burglarproof car stereo.

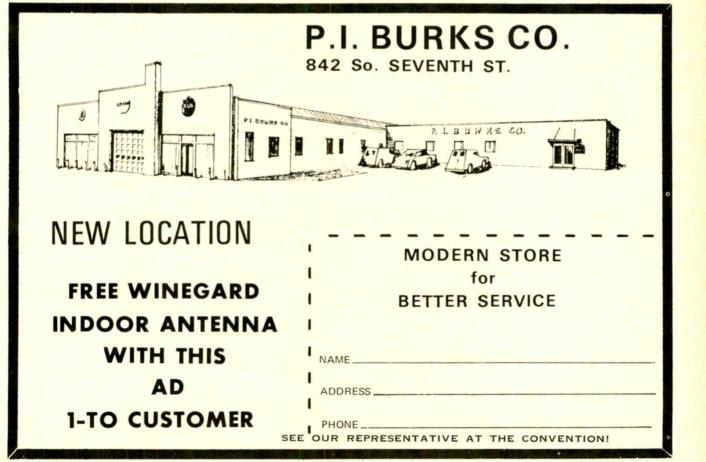
CRAIG



THE COLLINS CO., Inc.

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RESERVE ROOMS AS SPECIFIED SINGLE(S) 1 FULL SIZE BED DOUBLE(S) 1 FULL SIZE BED (2 PERSONS) OF AMERICA KETA CONVENTION WILL ARRIVE DATE & TIME WILL STAY NIGHTS WILL DEPART ADDRESS CITY STATE ZIP

FREE ENTERPRISE

By CLIFFORD E. SACHLEBEN, CET No. 7

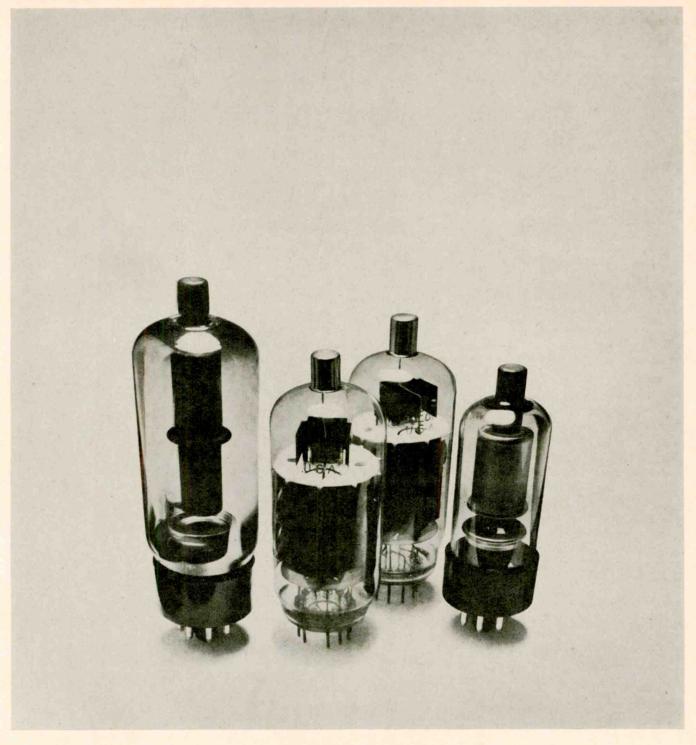
According to Webster, free enterprise is the economic doctrine or practice of permitting private industry to operate with a minimum of control by the government. May I ask what is too much government control? This definition as applied to business before World War II was the only solution to keep a continuing rise in the economy. With the advent of the atomic age and now the space age, the economic doctrine can no longer be applied. Large corporations are squeezing the small independent business out of existence. Corporations with horizontal integradation (corporations that manufacture more than one product such as automobiles, electronic equipment, and appliances) are pushing the smaller one line corporations out of existence. The large corporation can obtain a better buying position for his raw products or if it sustains a loss in one product produced it can be absorbed by the others (diversification). A corporation producing only one product could be forced out of the field if a loss is sustained over a long period of time. A good example was National Video manufacturing color picture tubes.

Corporations which practice vertical intergradation (a corporation that produces a product from raw material and sells this product to the final consumer) makes competition tough for the small independent business. A good example would be when a television manufacturer makes a television and sells it to the final consumer.

There must be something wrong with the distribution system when the discount corporations can sell a product for less than the price the small servicing dealer must pay for the same or like product. The chain discount corporations claim that their stores are located in high rent areas and their operating expenses are much greater than the small independent dealer. Therefore, they should be able to buy the same product at a much lower cost. Rents are cheaper for some of the smaller dealers but very often other costs are greater, such as: preparation of the building to be burglar proof, expensive burglar alarms, exceedingly expensive burgular insurance or no insurance, and the dealer must assume the risk.

Gentlemen, the time has arrived when the small servicing dealer must get on the band wagon and carry his share of the load to overcome these obstacles that are in the paths of progress.

Several states and cities are already on the move with the co-operation of their associations. California with the Bureau of Electronic Repair Dealers Registration, Indiana with a television and radio license law, and Kansas City with similiar ordinances. Other states and areas have enacted similiar statues. The seventies could be and will be wonderful years if the Kentucky servicing dealers will join and support the Kentucky Electronic Technician Association. One man has not won any battles by himself but armies can win wars. Will you give your time and support to make KETA the best electronic technician association of its kind in the USA?



Our hot ones are the last to go.

The last thing you need is to be called back a day or two after you've replaced the sweep or high voltage tubes in somebody's color TV.

But, they're usually the first to go. Because they get so hot.

So we figured out how to cool them. Now, they last a lot longer.

Take our 6JE6C/6LQ6, for example. It's the horizontal deflection tube that takes such a beating when the set gets hot.

Well, we've given it special patented radiator fins that first absorb the heat and then radiate it out of the tube.

Now it runs cooler and lasts longer. Same for our 6JS6C.

Or take our 6BK4C/6EL4A. That's the shunt regulator that eliminates runaway high voltage. We gave this one a whole new anode and shield design to improve heat transfer and stability.

Now it also runs cooler and lasts longer.

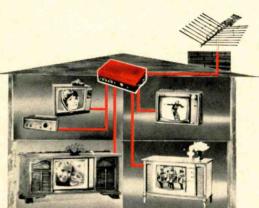
Or take our 3A3B high voltage rectifier. This one's got leaded glass for added protection. And it lasts longer too.

So next time you have to replace any of the hot ones, just cool it. You'll both last longer.

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GENERAL TELEPHONE & ELECTRONICS

JFD is ready!...20 million homes are ready!... Get ready...get set...go with new

Home Entertainment JFD Program Center Kits



- ★ Provide up to 4 TV sets with different programs from 1 antenna.
- ★ Beautifully packaged in full-color carry-home display
- ★ Distribution amplifier powerful enough to drive up to 12 sets — with additional splitters.

Whether you install it yourself or sell it over-the-counter, the unique JFD Home Entertainment Program Center Kit gets you in on the ground floor of a lucrative new untapped market - 20 million households with two or more sets that can use a distribution system.

Make every home an entertainment center!

Thousands of old home owners, new home owners. contractors, and builders in your area are ready-to-buy prospects for (4) JFD Program **Center Kits**

Easy to sell! Easy to install!

SEE YOUR DISTRIBUTOR OR WRITE FOR OUR PROMOTION KIT



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