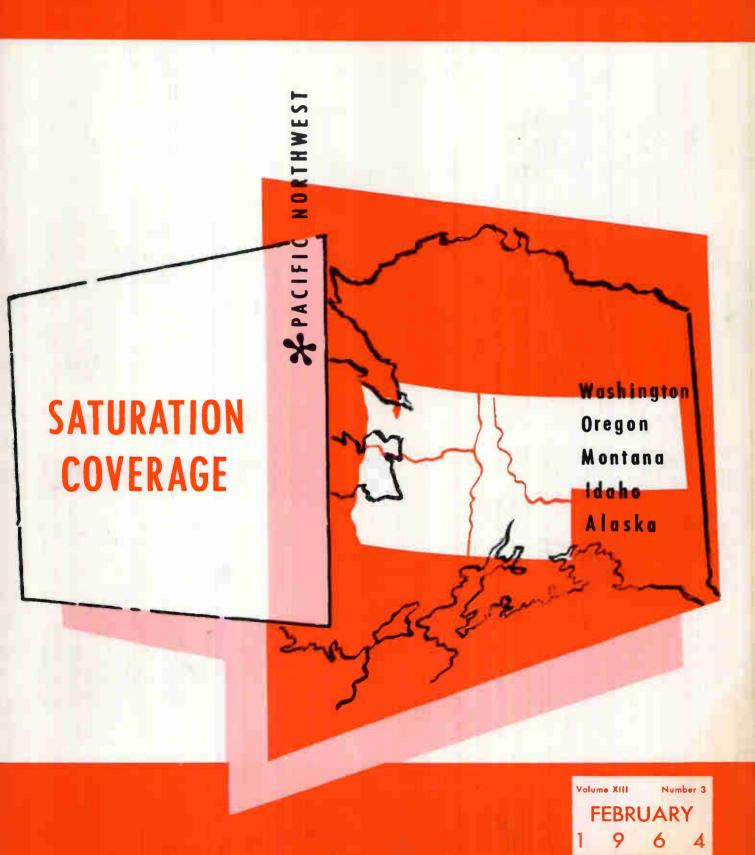
THE NORTHWEST ELECTRONIC WORLD





Why an International Line?

It makes good cents . . . for you to buy and sell. It makes sense (and cents) to your customers, too, when you tell them that the Raytheon International line of receiving tubes are manufactured in selected foreign countries in accordance with design, material, and performance specifications furnished by Raytheon. When you consider the years of experience Raytheon has supplying tubes to the U. S. Government for both military and non-military applications, supplying industrial tubes, and domestic entertainment types, that's the best assurance of superior quality you can get.

Raytheon International tubes are designed for applications in U. S. radio, television, and phonographic equipment. They are life tested and quality evaluated, based on Raytheon and U.S. industry standards, and subject to continuing engineering and quality control evaluation to exactly the same specifications as those used for Raytheon's expanding American made receiving tube line. Not only are their characteristics controlled, insuring interchangeability, but there is continuing development of the newer type tubes to meet the needs of the domestic replacement market.

Continuing product availability is guaranteed through Raytheon's domestic Uni-Center warehouse servicing.

Now Raytheon gives you two highly profitable lines . . . American and International!

See Your Raytheon Distributor for Details

ADVANCED ELECTRONICS Bellingham, Washington 804 Dupont CAPITOL ELECTRONICS

GUY'S ELECTRONICS 1358 1/2 West Broadway Missoula, Montana H & R RADIO SUPPLY 1812 N.E. 43rd Avenue 697 South 12th Portland, Ore. 97213 Salem, Oregon

LAY & NORD 511 S. Third Street Yakima, Washington ROBBIE SUPPLY CO., INC.

AYTHEON

3715 State Street Boise, Idaho

NORTHWEST REPRESENTATIVE: DON H. BURCHAM CO., PORTLAND - SEATTLE - HONOLULU



NEWS FROM THE NORTHWEST CHAPTER

By Bob Waters (letter)

Northwest Electronic World Seattle, Wash.

Dear Jack:

Enclosed is a copy of the talk (synopsis) given to the NW Chapter NEDA at Tacoma by Fred Tolan. Fred being both a CPA and an Attorney spoke factually as well as interestingly and gave the Chapter one of the better programs.

There are many ways to save money on transportation. Among them, the new REA "Unit Pak" plan. With this plan the Express Co. will handle a unitized shipment from 600 lbs. to 2,500 lbs. at about half the first-class truck rate. The REA incentive plan will move 300 lbs. or more of express shipments billed in one day at a 40% discount (30 10-lb. packages to different destinations).

Seattle - Tacoma - Portland: Use overnite rail pickup and delivery service. Savings may run as much as 80% with a minimum of 50c per shipment. Fast LCL shipments over rail lines to nearly all major cities in the Northwest at less than truck cost.

Use preprinted bills of lading for more rapid handling.; just fill in weight and destination. Proper classification both inbound and outbound can save as much as 25%. Pool Cars also are advantageous with rates as low as \$7.15 cwt, with no minimum charge.

United Parcel gives statewide coverage at 19c plus 3c per lb. to 50 lbs., available in Washington and Oregon... Bus service is excellent.

THE NORTHWEST ELECTRONIC WORLD

Delivered by mail, free of charge, on the 15th of every month, to over 6,000 radio and television rechnicians, service shops, deolers, broadcost and industrial electranic engineers and other business firms who patronize the northwest rodio-TV-electronics distributors in the states of Washington, Oregon, Idoho, Montano and Alaska. This is 'complete' coverage.

> JACK WHITE Editor and Publisher
> Telephone: LAkeview 2-3388

Publication Address: P. O. Box 1645 SEATTLE, WASHINGTON 98125

Consolidate truck pickups. Use cartage company which picks up for numerous freight lines. Large shipments could well be handled by private trucks or truck lines.

Demand truck delivery on transloaded freight from east; Centralize warehousing and shipping of highvalue merchandise; Check purchasing terms to gain best freight advantage; Consolidate and specify routing from regular suppliers; Avoid bad carriers and route freight to avoid loss and damage claims.

This is a very short resume of the major points touched on by Mr. Tolan, and incidates some of the places where freight expenditures may be somewhat relieved, both incoming and outbound. Distributors and others who have occasion to transport merchandise could well save a tidy sum during a year by devoting some study to the precepts presented here.

Other items of news: The Chapter went on record as approving the expenditure from its funds of the cost of another session with Ed Altshuler, who put on the NEDA College of Knowledge last year. Subsequent correspondence with Mr. Altshuler indicates that the preferred dates of April 24 and 25 are satisfactory and that he will plan for these dates in Seattle. In addition, Mr. Altshuler will hold the two following days open for personal or individual consultation-April 26-27. Mr. Altshuler advises that Jack Berman has joined his group and will be in attendance at the Seattle meetings, and available through the two days following. Jack, as most are aware, is well known in the field of management consultation, and will have much to contribute to the 1964 meetings.

The Northwest Chapter plans officially to invite members of ERA. CEWA, WEMA and members of other groups who may be interested, to attend the two-day session.

The next meeting of the Northwest Chapter NEDA will be held in Seattle, Washington. On the agenda will be the election of new officers for the year 1964. Jim McGoldrick is chairman of the nominating committee. As usual, The Northwest Electronic World will carry news of the time and location of the meeting.

Regards,

BOB WATERS

Farwest Electronics, Inc. President, Cascade Chapter

Ace Electronics Supply New Eugene Distributor

Latest entry into the field of electronic distribution in the Northwest is Ace Electronics Supply, of Eugene, Oregon. Ace Electronics Supply came into being through the efforts of Joe Simon and Clarence "Scotty" Scott, both well known to the electronic trade in the Eugene. Oregon area. Don Birkes, more recently of the Lou Johnson Company, will be the "contact man" as outside salesman for the new organization, and has been most effectively working the field during the past month and a half.

Joe Simon has been in the radio-TV service business in the area for the past fifteen years. His original training came at the Eugene Technical Vocational School. Joe has operated a most successful service business in Creswell. Oregon, for many years prior to his decision to join the "distribution" side of electronics, when Scotty was manager of the Lou Johnson Co. branch in Eugene, at which time he sold out his service business and joined the L.J. Co. as counterman. Following a period of working together, Scottie and Joe found a field of mutual interest and formed Ace Electronics. Inc., a service organization with a purpose; that of determining the value to the trade of a truly Service Electronic Distributor. The net result of this association is the inception of Ace Electronic Supply.

Scottie entered the electronic field through his service association with the U.S. Navy during World War II during which he served as electronic technician and has been in the trade ever since. His experience includes management of successful retail service organizations. association with MATV, CCTV and CATV organizations, as well as his association with the parts distribution industry, in which he has served for many years as branch manager for the Lou Johnson Company store in Eugene, Oregon.

The new firm of Ace Electronics Supply is dedicated to bring the best of electronic equipment and supplies to the service dealers of Lane and Douglas counties of Oregon.

It is the intention of Ace Electronics Supply to bring to the trade in the Eugene area the best products and the best service . . . and who can better know the needs of the service industry than a successful service organization?



New Location of Advanced Electronics

Mid-State Radio Supply

Wenatchee,

Washington

NOrmandy 2-8103

Wholesale Radio-TV Parts
& Accessories

Serving Central Washington

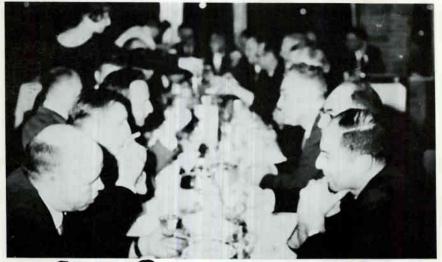
We almost "goofed" and said that Advanced Electronics had moved! In a way this is the fact, but it not being our wish to confuse anyone, we hasten to say that Advanced Electronics has not moved for quite some little time, but that it has taken us some little time to get to Bellingham, Washington to see and photograph the new location.

Around the middle of the year 1963, Advanced Electronics suddenly found that the old quarters on Grand Avenue in Bellingham were finally getting just too small to longer contain the operation, and moved to the present spot at 804 Dupont, Bellingham.

The new plant offers ample space for sales floor area and warehousing with a total floor area of over 7,500 square feet. The sales and display areas comprise some 3,000 square feet with offices and more display in front and warehouse space with drive-in doors at the rear. Photo shows the building and large parking area.

A real nice location and lots of room. Don Prouty and his group can grow quite a little before becoming cramped in this location, and we hope they do.







CASCADE CHAPTER, ERA

The January meeting of the Electronic Representatives Association was held at the Norselander restaurant Monday, January 6th.

Following the opening and reading of the minutes, the new officers were introduced, and the gavel turned over to the incoming president. Officers for the new year are: Doug Jessup, president; Bill Wood, vice president; Ray Squibb, secretary-treasurer; Distributor - Audio Chairman, Bob Morrison, and Bob Entrop, Chairman, Industrial Section.

Committee chairmen include: G. M. (Granny) Gillette, membership; Lloyd Robbins, social; and Ed Tombs, telephone committee.

The prime item of business was that of the publication of a new directory, which is now nearing the "ready stage." This new directory will be similar to that previously printed, with some changes in format, and, of course, brought up to date with respect to both product and representation.

Some discussion was heard regarding the situation at the Boeing Co., as effected by cancellation of Dyna-Soar. Harry Levinson was appointed a committee of one, with authority to speak for the Cascade chapter in conversations both with the Boeing Company and with state legislators. President Doug Jessup will communicate with the National in an effort to elicit national support

for proposals regarding contract abrogation.

A discussion of preferred meeting nights was held with a decision turned over to the executive board. Members will be advised at a later date, schedule of meetings for 1964.

Late word is that there are five or six representative firms which are sending in applications for membership . . . indicating that Granny is hard at work, and that others are able to see the benefits to be derived from a "united front" and cooperative action.

Of interest to the chapter and others in the industry was the announcement of consolidation between the Cane-Jessup Company and the Burt Porter Company. Mike Seidl, former member of the Porter organization, has always pined for his first love, engineering, and has now returned to the Boeing Company, his interests in the Burt Porter Company being taken up by the members of the new firm, which will be known as "Vector." Principals are: Doug Jessup, Sherm Cane, Con Copp and Bob Morrison. Organizational arrangement is: Sherm Cane, president; Doug Jessup, vice president and operations manager; Con

Copp, vice president and sales manager, and Bob Morrison, secretary-treasurer. Inside sales will be handled by Dick Shaw and the office operated by Kathy Lybyer and Judy Henderson. The firm will also maintain an office in Portland, Oregon with Duane Keagle in charge.

New Lines

Seatronics, Inc., of Seattle, Washington, has been appointed to represent the products of the Aeronautical and Instrument Division of Robertshaw Controls Company of Anaheim, California for the majority of Washington and Northern Idaho.

New Electronic Plant In Coeur d'Alene, Idaho

A new manufacturing plant was placed in operation in Coeur d'Alene, Idaho during the past month. The new firm is Convac, Inc. Convac produces an unusual type of vacuum switch and vacuum capacitors as well as other electromechanical devices. Initial employment is 21 persons, with anticipated increase during the year to some 125 employees. All adding to the improving economy of the Inland Empire.

ROUND-UP ELECTRONICS

Growing



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Oregon

Route 1, Box 126R Phone 276-3152 Pendleton, Oregon

it's here Norelco

"CONTINENTAL"



The ONE line of quality Recorders for every customer who comes into your store!

Distributed by:
TEL-ELECTRIC DISTRIBUTORS, INC.
N. 734 Division SPOKANE 2, WASHINGTON FAirfax 7-4421



TSA KING COUNTY

By Clyde Ellis

The January meeting of King County TSA was held January 9th at the Stewart Hotel in Seattle. Speaker for the evening was Mr. Will Keltner of the Radio Transmission Engineering Dept. of the telephone company. Mr. Keltner spoke on Tel-Star and presented a film depicting its construction, launching and its use as a communication satellite.

Business included a report by Harold Hart on the "Sticker Project" and a poll of the members regarding

quantities required.

A report from Jim Humphrey on the membership package was read and Treasurer Hal Hjelte summarized the costs involved. The membership approved a proposal to prepare 100 loose-leaf membership manuals along the lines discussed at this and previous meetings.

President Ellis appointed a nominating committee to recommend officers for the coming year. Nominating committee report to be ready for presentation at the February meeting.

Tame Meets With FCC To Air Views On CATV

Members of the newly formed Television Accessory Manufacturers Institute (TAME), recently met with members of the FCC informally to discuss their position with regard to the spread of the CATV industry, and its effect on other portions of the electronic industry. Opinions expressed by TAME members included: CATV has to seriously impede the progress of UHF in general. CATV has used "questionable policies" in securing CATV franchises. CATV is competing with a wholly regulated industry-broadcasting-and as such constitutes unfair competition. Pictures on CATV customers' sets are less excellent than those obtainable with a privately owned antenna.

Mort Leslie, acting chairman of TAME, calls for a re-study of the communications act with a view to giving the commission power to license and regulate all CATV systems in the public interest.

Citizens Band & Business Band Two-Way Radio

Your New Market for Sales!

Kaar Radio

E. C. I. Courier

General Radio Telephone International Crystal Pierce - Simpson Antenna Specialists

Super Magnum antennas & conversion kits for Magnum antennas, In Stock

Dealerships Available

KFI - 0994 - channel | |

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HAY & CARMAN

ELECTRONIC DISTRIBUTORS



Electronic Parts and Equipment for Service and Industry

Serving Eugene and the Lower
Willamette Valley

333 West 8th Street

Dlamond 2-1241

EUGENE, OREGON

Watch Taco go!

Taco Distributors

ADVANCED ELECTRONICS
Bellingham, Washington
804 Dupont

CAPITOL ELECTRONICS
697 South 12th
Selem, Oregon

COLUMBIA ELECTRIC
E. 3421 Ferry St. — Spokene 24
406 N. Fruitland—Kennewick
9th & F Sts.—Lewiston, Idaho

F. B. CONNELLY COMPANY
14 South Idaho St.
Seattle 4, Wash.

H & R RADIO SUPPLY 1812 N.E. 43rd Avenue Portland, Ore. 97213

MAY & CARMAN, INC. 333 West 8th St. Eugene, Oregon

HUGHS ANTENNA SUPPLY 2380 Fairgrounds Road Salem, Oregon

> WIBLE ELECTRONICS 3723 S. Lawrence Tacoma, Wn. 98409

THE SAME ENGINEERING, SAME PLANT THAT PRODUCES AMERICA'S GREATEST SATELLITE-TRACKING AND TELEMETRY STATIONS, HAS CREATED



- ... Unparalleled performance because it has ALL 5:
- HIGHEST GAIN

- EXTREMELY LOW VSWR
- SHARPEST DIRECTIVITY
- BEST FRONT-TO-BACK RATIO

RUGGED CONSTRUCTION

HERE IT IS—the space-age TV/FM antenna from the only manufacturer with actual experience in making space-probing antennas!

All new, the PARALOG is the first home antenna that really comes through with log-periodic

design plus a unique parasitic-element system for maximum all-channel gain and pinpoint directivity. Exclusive Cycolac insulating mounts assure constant impedance, eliminate troublesome cross-feed design. Extremely rugged construction.



There are fourteen PARALOG antenna models, listing from \$19.95, including four electronic PARALOGs with Super Powermate preamplifier, and three special FM stereo models. See your Jerrold-TACO distributor now, or write Jerrold Electronics, Philadelphia 32, Pa.

NORTHWEST REPRESENTATIVE: DON H. BURCHAM CO., PORTLAND - SEATTLE - HONOLULU



Richard Legg Company Holds Sencore Meetings

The Spring series of technical meetings includes a series on the equipment of Sencore, Inc., sponsored by area distributors and put on by the Richard Legg Company, representing the manufacturer.

The series was "kicked off" with a meeting held at Portland, Oregon under the sponsorship of T & R Supply. A total of 28 persons was in attendance to hear Al Grahn, of the Legg Company, discuss the various instruments manufactured by

Sencore, Inc. Al introduced the various items in the line with a short description of each, emphasizing the Sencore thinking that "Time is Money" and that ease of setting and rapidity is an important item in choosing test equipment.

The major portion of the time was devoted to the always new, always different, problem of setting purity and convergence in color sets. Sencore has developed a technique for this operation which is quite rapid and fairly simple.

A slightly different approach in another unit is the Sweep Circuit

Analyzer, which is supplied with recorded instructions, which will take the technician through the test procedure by means of a 33 1/2 RPM record explaining each test.

The schedule of future meetings includes the following dates, cities and sponsors. In all cases it will be necessary for technicians to contact the distributor for time and location:

Wednesday, February 26, Tacoma, Washington, sponsored by C & G Electronics Co.; Thursday, February 27, Centralia, Washington, sponsor, C & G Electronics Co.; Tuesday March 3, Seattle, Washington, sponsor, C & G Electronics Co.; Thursday, March 5, Vancouver, B. C., sponsors, Western Agencies, Ltd., and Wholesale Appliances, Ltd.; Friday, March 6, Bellingham. Washington, sponsor, Advanced Electronics. The meeting in Bellingham will close the current series. All area technicians are urged to contact the sponsoring distributor nearest to their location for time and location . . . Also check your February issue of PF Reporter for complete listing of the Sencore line.

Around the World In 28 Days

Sometime after May 18, 1964 some electronic technician in the United States is going to store his circuit tester, cool his soldering iron and hang out the "Gone Traveling" sign.

He'll be off on a jaunt around the world as the winner of International Rectifier Corporation's 1964 "Round The World" contest. First prize is a 29-day solo trip around the world that will cover three continents and nine countries, or, if the winner prefers, a 15-day trip for two to Europe.

Entry blanks for the contest, which opens March 1 and closes April 30, are available at all IR distributors, who will share in the winning technician's good fortune. The salesman whose name is on the winning entry will receive a three-day trip to the New York World's Fair or \$500 in cash.

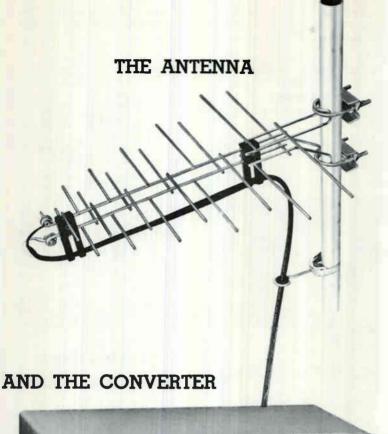
There is no limit to the number of times a technician can enter the contest. A separate entry blank with a completed four-line limerick and a label or box-end from any IR product or a facsimile of the IR trademark are the requirements.

Say you saw it in the Northwest Electronic World.

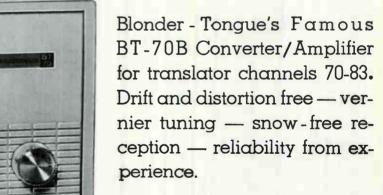


TO GET THE MOST FROM YOUR TRANSLATOR,

YOU NEED:



Blonder-Tongue Golden Dart Log-Periodic UHF Antenna. Uniform polar pattern and gain (10 db) over the entire U. H. F. spectrum. Flat response (+ ½ bd) on all channels assures top color reception. Rugged welded construction — no joints to corrode. Quick simple installation. Only \$5.95 List.



DESIGNED FOR THE JOB BY THE MOST EXPERIENCED UHF EQUIPMENT MANUFACTURER IN THE BUSINESS. BLONDER - TONGUE IS NO "JOHNNY - COME - LATELY" OPPORTUNIST — THEY'VE STAYED WITH U.H.F. AND UPGRADED THE STATE OF THE UHF ART SINCE ENTERING THE UHF FIELD IN 1954. — AND THEY'LL BE HERE FROM NOW ON. PROVEN EXPERIENCE AND QUALITY THAT YOU CAN RELY ON WHEN YOU BUY BLONDER - TONGUE.

BLONDER*TONGUE Mid-State Radio Supply

Wenatchee, Normandy 2-8103 Washington



VIOLET HILL NELSON, former owner of station KORE in Eugene. Oregon, passed away on January 1 at the age of 62 years. Mrs. Hill with her husband Frank, owned KORE from 1926 till 1948.

ROBERT (BOB) HUMPHREYS has been named general manager at station KSRV in Ontario, Oregon. Bob replaces long-time manager Gordon Capps, who is retiring. STAN McNUTT will replace Bob as Nyssa representative for the station.

ROBERT E. HAWKINS has been appointed program director at station KEX, Portland, Oregon. Hawkins comes to Portland from KSFO in San Francisco, Calif., sister station to KEX.

JOHN K. BROWER, writer-producer for KWSC. Pullman, Washington, is leaving the station to become associated with station WETA-TV in Washington, D.C.

MARY WYNN BLOXOM has joined the staff of station KOMO-Radio-TV as assistant to Katherine Wise, home economist. Miss Bloxom comes to KOMO from the Betty Crocker kitchens, where she was engaged in the developing and testing of recipes. Miss Bloxom, in 1961, was named one of the ten best dressed college women in America.



1963 FIRST AVENUE SOUTH SEATTLE, WASHINGTON 98134 MAIN 4-6505

New Catalog From Jack Pruzan Company

During the past few years most of the CATV operators and other users of everhead construction equipment in the Pacific Northwest as well as other parts of the country, have received copies of the Jack Pruzan Company Catalog-Stock list. The word reaching this office is that the presses are relling again, and that very soon there will be a brand new issue of this popular, and now more complete listing of overhead construction and allied equipurnent and tools, avail-

Jack says that they are continually trying to get more and better information on the materials stocked at the Pruzan Company, into the hands of those they supply. Time was, when Pole Line Hardware and Jack Pruzan were mentioned in the same breath. Jack now advises that the company has gone much further into the areas of equipment and tools for power and communications, and that the scope of materials available is now more than double what it was even a short time ago.

If you have not received your copy of the new Pruzan Company Catalog-Stock list, don't look for the line!! Just drop a note, or call Jack Pruzan Company, MA 4-6505, 1963 First South, Seattle, Wn. 98104.

Say you saw it in the Northwest Electronic World.



...a pair of assortments that give you the capacitors you need most often for servicing Transistor Radios!

> Popular-rated replacement capacitors, neatly packed in rugged yet attractive blue plastic cases which sparkle with embedded



SPRAGUE PRODUCTS COMPANY (Statement Supply Shabilitary of North Adams, Mass.

NORTHWEST REPRESENTATIVE, DALE G. WEBER CO., PORTLAND, OREGON

US from your Sylvania Distributor



Was your name part of this hard-sell ad in GUIDE



If you took advantage of the offer, February 8th TV Guide tells every reader in your neighborhood that you are the expert on whether they should repair or replace their TV set. And a helpful free booklet titled "Fix or Buy?" is in your hands for distribution free to your customers. ■ National advertising in TV Guide, the booklet, plus a banner advertising the booklet for your store—a triple-barreled way to hit your very best prospects. Specials like this are available regularly through your participating Sylvania Distributor. They show that he is sincerely concerned with raising your profits and your prestige-and so is Sylvania. Tou can expect more than the highest-quality tubes when you deal with your Product-Plus Sylvania Distributor.



PRODUCTS

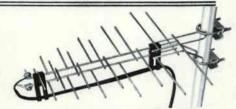
stradford

The Stradford Model 480 is a HiFi Adaptor designed to reproduce television sound in true high fidelity through a HiFi amplifier or receiver. The Model 480 Adaptor picks up the HiFi signal in the TV set and feeds it to the amplifier or receiver, after which the HiFi sound is reproduced through the speaker system. The coupler is placed around the glass of the sound detector tube in the TV receiver, picking up true high fidelity sound. The other end of the wire is then connected to the Adaptor. A patch cord furnished with the Adaptor is then connected to the auxiliary input of the amplifier or receiver. Either the wire or patch cord may be extended to desired length without loss of fidelity.

blonder-tongue

Blonder-Tongue Laboratories, Inc. has announced the introduction of a new UHF television antenna based on the periodic principle. The periodic concept, based on principles used in the U.S. satellite program, is said to provide more uniform gain than conventional antennas.

Called the Golden Dart, the new UHF antenna rounds out a complete line of Blonder-Tongue products, which includes converters, boosters, amplifiers and couplers. List price: \$5.95.



A unique feature of the Golden Dart is the use of unbreakable polypropylene insulators to maintain the proper distance between the lead-in wire and the antenna. This minimizes standing wave ghosts resulting from faulty impedence match. (Continued on page 19)

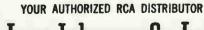
LOU JOHNSON CO., INC.

IS PROUD TO ANNOUNCE ITS APPOINTMENT AS AN RCA DISTRIBUTOR EFFECTIVE Jan. 1, 1964.

Complete stocks of the following RCA Product categories are now available for immediate shipment:



Receiving Tubes Industrial Tubes Batteries Silverama Picture Tubes Industrial Semiconductors Test Equipment





PAGE 12

Lou Johnson Co-Inc.

PORTLAND, DREGON 97209



ESDA OF COWLITZ COUNTY

By Clyde Ellis

The January meeting of the Cowlitz County Electronic Service Dealers Association was held at Bart's Restaurant in Longview, Washington, Monday evening, January 6th. The important items of business included: election of officers and an interesting discussion of the cost of doing business and elimination of wasted time.

New officers include: Robert Vroman, president; Hal Grotvig, vice president, and Ansel Heckman, secretary-treasurer.

The February meeting (February 3) will feature a continuation of the studies on the cost of doing business, profits, dollars and percentage, and shop efficiency.

Shop owners from adjoining areas are invited to attend this meeting and express their views regarding the important subjects under discussion.

Reorganization At the Lou Johnson Company

During the past few months there has been considerable reorganization and personnel realignment in progress at the Lou Johnson Company in Portland, Oregon.

Activities have now been streamlined at the Portland store through improved internal facilities, improved methods and increased personnel and inventories, so that it has been possible to close the Eugene branch of the firm and handle all orders from the Portland store with a quality of service which often exceeds that formerly given by the branch operation. Inventories have been consolidated and the results have been most gratifying.

Concurrently, a new, distinct and separate industrial department has been set up in the main store and this function also is rapidly gaining additional sales.

Many of the new methods and practices are the result of answers to a bulletin-questionnaire sent out to the trade earlier. Many excellent suggestions were received, and many have been put into practice. L.J.C. extends thanks to those who took time out to assist in the improvement of the operation, in order to facilitate better service to Lou Johnson Company customers.

Say you saw it in the Northwest Electronic World.



NEW E-V CARTRIDGES 163, 163D, 169, 169D DIRECTLY REPLACE POPULAR SONOTONE MODELS WITHOUT REWIRING, SOLDERING, OR MODIFICATION!



SUFFERING FROM **DUOLINEITIS?** SONOTONE

(We've concocted a sure cure!)

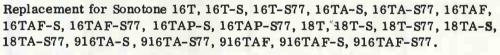
FOUR NEW E-V CARTRIDGES REPLACE 40 SONOTONE TYPES WITHOUT MECHANICAL OR ELECTRICAL MODIFICATION!

Superior to originals in:

. Electrical design . Response . Isolation . Compliance

No, our cartridge lab experts aren't "Mad Scientist" types; they're quite happy. in fact. having just given you four new E-V cartridges which replace 40 popular Sonotone types. To cap it all off, each cartridge is superior to its original--and is competitively priced-within pennies, plus or minus!

MODEL 163 - with E-V needle, No. 2619



MODEL 163D - with E-V diamond needle, No. 2619DS

Replaces Sonotone 16T-SD, 16TA-SD, 16TAF-SD, 16TAP-SD, 18T-SD, 18TA-SD, 916TA-SD, 916TAF-SD.



163

MODEL 169 - with new E-V rubber-coupled needle, No. 2622

Replaces Sonotone 9T, 9T-S, 9T-S77, 9TA-S, 9TA-S77, 9TAF-S, 9TAF-S77.

MODEL 169D - with new E-V rubber-coupled needle, No. 2622DS

Replaces Sonotone 9T-SD, 9TA-SD, 9TA-D77, 9TAF-D77, 9TAF-SD.

RUBBER-COUPLED NEEDLES FOR 169 AND 169D CARTRIDGES. More rugged than the originals; less distortion, especially at high frequencies.

A - GEM SUPPLY 1017 Arthur St. Caldwell, Idaho

ADVANCED ELECTRONICS 804 Dupont

Bellingham, Washington ALASKA RADIO SUPPLY

Juneau, Alaska ALLTRONIC DISTRIB'T'RS, INC. 2008 Northwest Blvd.

307 Seward Street Spokane, Washington **ELECTRONIC PARTS** 2104 Brooks Street Missoula, Montana

FRANK'S ELECTRONICS 204 East Augusta Spokane 21, Washington

GARRETSON RADIO SUP., INC. 2217 3rd Ave. Seattle I, Washington W. A. GEIGER RADIO 1101 N. Columbia Street

Ellensburg, Washington

HAY & CARMAN, INC. 333 West 8th St. Eugene, Oregon

HUGHS ANTENNA SUPPLY 2380 Fairgrounds Road Salem, Oregon

LAY & NORD 511 S. Third Street Yekima, Washington PRUDENTIAL DISTRIBUTORS 3304 East Ferry Spokane, Washington

TV & RADIO SUPPLY CO. 1218 S.E. Grand

Portland 14, Oregon WESTERN ELECTRONICS CO. 717 Dexter Ave.—Seattle 9, Wn. 213 W. Heron—Aberdeen, Wn.

NORTHWEST REPRESENTIVE—WM. R. LANPHEAR CO. SEATTLE, WASH.

News From NEDA (National)

The Board of Directors of the National Electronic Distributors Association at its midyear meeting January 19th, instructed its Executive Vice President, Gail S. Carter, to "carefully examine . . . both the merits and demerits" of cable television, and that these findings be "brought to the attention of all NEDA members through such means and media as may be available" and in Carter's judgment, "appropriate for this purpose."

The action was taken by the Board

after a resolution was adopted stating that the Board "believes that the expansion of community antenna TV systems into areas where adequate television reception is possible with the set owner's own antenna may not be in the best interests of either distributors of electronics or the TV service technician or, in the long run, that of the viewing public,"

EIA ASKS YEAR'S EXTENSION OF RELAXED UHF RADIATION RULE

The Consumer Products Division of the Electronic Industries Association has asked the Federal Com-

munications Commission to extend for a year the relaxed radiation requirements for ultra high frequency television receivers.

UHF sets, which operate on frequencies between 470 and 1000 mc, are required under a temporary condition to limit radiation to 1000 microvolts per meter. EIA's request is to extend this temporary period, which ends next April 30, for one year, or until April 30, 1965.

VHF sets are allowed a radiation of no more than 500 microvolts per meter.

EIA submited information collected by its R-4.9 Subcommittee on TV Tuners showing improvement in the ratio of UHF sets with radiation of less than 500 microvolts per meter since 1960, based on measurements by 10 companies.

The association said the introduction of semiconductor devices shows promise of "significant further improvement," but there is insufficient data as of now to determine the extent. A number of industry members who have had experience with semi-conductor devices in current tuner designs are concerned with their inability to make production models radiating as little as 500 microvolts per meter,

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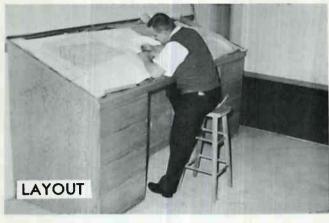
JACKSON MEETING PRESENTED BY SEATTLE RADIO

The meeting here in Seattle was attended by some 40 technicians, at the Norselander, and Al, as usual gave an excellent dissertation on servicing. This time, with special reference to color, and with special emphasis on the setting of purity and convergence.

To facilitate the ease of understanding of color circuits, Mr. Nanni had prepared large diagrams indicating the standard B/W portions, with the chroma circuits superimposed. Stressing the fact that the chroma circuits were additional to the standard B/W circuits with which all are familiar, and as such, should not become any particular problem.

Stressing the supreme importance of proper and complete converg-ence (with an interesting wager offer). Al stated that the great majority of color sets are not operating to the full extent of their capability. Due in a large measure to improper, or incomplete convergence. This, of course, includes only those sets which are complete, not the stripped

(Continued on page 16)



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CONSTRUCTION

SEATTLE RADIO

(Continued from page 14)

design, which can never be satisfactory over a period of time.

Another interesting item which Mr. Nanni pointed out was the inefficiency of the drug store checkers, which presently are driving their operators crazy (dandy) because they will not properly test many of the tubes now in use, particularly in color sets. Some of the new tubes, tested on this type of tester, will actually test the same with all pins but filament and cathode removed, as with the base intact, we are told.

The other most pertinent item mentioned was that of suiting the probe to the oscilloscope. The prime motive of this meeting was the proper use of the oscilloscope in service, and Al was most definite on this point. Probes should match the scope. Regardless of manufacture, and there are many fine oscilloscopes, they should be used with the probe which is made to to complement the equipment with which it is used. Shun the "cheapie" which will match anything.

After going through the set stage by stage, Al threw the meeting open for questions. Time ran out!

There were more questions than time would permit. Al, as usual, was most generous with his time and stayed till after midnight answering questions and trying to solve individual problems for tech-

As a final word during the formal part of the meeting, Al states that the old CRO-2 is still a fine scope. and usable for TV work, but that capacitors should be changed from the paper components to Mylar, A good tip for the many owners who had thought they needed a new scope to adequately perform service on TV, particularly Color TV.

More home work was given, to be completed before Al's next trip in the fall.

KATU-TV, Channel 2 **Operating New Tower**

Portland's Station KATU-TV began operating from its new tower located on the west hills near the other station towers in Portland. This move from the Camas location was accomplished with a minimum of difficulty, and the station is now being received in many areas of Portland and vicinity, which hitherto had been unable to receive its signals.

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UNIVERSITY MODEL CIB-A 25 watts 250·13,000 cps 120° × 60° dispersion 73/8" high, 14" wide, 12" deep In 4, 8, and 45 ohm impedances.

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Broadcast News

By J. B. HATFIELD Consulting Radio Engineer

BURNS, Oregon—Station KRNS in Burns, operating full time on 1230 K.C., has applied to the FCC for a power increase to 1.0 K.W. daytime.

ELLENSBURG, Washington—Station KXLE in Ellensburg has received authorization from the FCC to increase daytime power to 1.0 K.W. on 1240 K.C.

EUGENE, Oregon—The FCC has approved the purchase of FM station KBMC in Eugene by Alan C. and Ruth M. Graves for \$22,571.

GREAT FALLS, Montana—Radio station KARR-FM in Great Falls began regular broadcasting on December 31st on 106.3 M.C. with a power of 3.0 K.W. Owner and General Manager Pat Goodover stated that the station is to be operated separately from KARR-AM. He said stereophonic multiplex broadcasting will be added in the spring.

IDAHO FALLS, Idaho—An application has been filed for a new FM station with the FCC, in Idaho Falls on 96.1 M.C. with a power of 40.7 K.W. The application was filed by

station KID of that city.

LYNDEN, Washington—James W. Schuyleman has applied to the FCC to purchase station KLYN-FM in Lynden for \$24,000.

MOSCOW, Idaho—The FCC has approved the purchase of station KRPL (1400 K.C., .25 K.W. Full time) in Moscow by Mr. and Mrs. John P. Mix, and Mr. and Mrs. Tom Neal for \$90,320

PASCO, Washington — Cascade Broadcasting Co. has asked for bids for construction of a television station KEPR in Pasco. Plans have been issued by Architects Cowan-Paddock-Hollingbery to Tri-Cities contractors.

PORTLAND, Oregon—TV station KOIN in Portland has been granted a construction permit by the FCC to increase its antenna height to 1751' above average terrain.

PORTLAND, Oregon — Station KWJJ of Portland, plans to increase power to 50 kw in the near future. Harold C. Singleton, Portland Consulting Engineer, is working out details for the expansion following his return from Spain, where he installed a 250kw short wave station for Radio Liberty.

PROSSER-SEATTLE, Washington

—The wind storm on January 19th

toppled the tower-antenna of station KACA-FM in Prosser, and one of the three towers utilized by Seattle station KING-AM at its transmitting site on Vashon Island. KACA-FM was off the air for about one day and KING-AM was able to continue broadcasting on one of the remaining towers.

SALEM, Oregon—A construction permit for a new FM station in Salem has been issued by the FCC to Chris Seely, on 105.1 M.C. with a power of 25 K.W. Mr. Seely is president of a collection and credit firm in that city.

SEATTLE, Washington — Station KBLE in Seattle (formerly KNBX of Kirkland) commenced operation on 1050 K.C. during December with an increased power of 5,000 watts daytime. The station's offices and studios are at 114 Lakeside and the transmitter site on Seattle tidelands near Harbor Island. KBLE is owned by the Eastside Broadcasting Co., an equal joint partnership of Lamar N. Ostrander, Kirkland attorney, and George A. Wilson, Mercer Island broadcaster.

SEATTLE, Washington — Station KIXI, operating on 910 K.C. in Seattle, has applied to the FCC to increase daytime power to 5.0 K.W.

THE DALLES, Oregon—William E. Neuman of Caldwell, Idaho has applied to the FCC to purchase KACI (1300 K.C., 1.0 Daytime) in The Dalles for \$40,000. Mr. Neuman is a sales engineer for International Good Music, Inc.

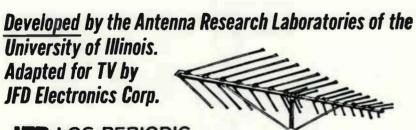
WOODBURN, Oregon — Contract for supplying equipment for the O. L. Withers, Woodburn radio station has been signed with the Gates Radio Co. of Quincy, Ill., according to Byron Stephenson, station manager. Inside work on the studio at Pacific Coast Institute of Technology on Pacific highway in Woodburn has begun.

JAMES B. HATFIELD

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NEW PRODUCTS...

(Continued from page 12)

ifd

The JFD Antenna Research Laboratories, Champaign, Illinois, has released for production a new series of UHF antennas based on the newly developed Log-Periodic concept.

Design of the new antennas conforms to the principles developed in the Antenna Research Laboratory of the University of Illinois and covered in Patent No. 3,108,280, recently issued to the University Foundation. JFD is licensed exclusively to produce commercial antennas under the Foundation Log-Periodic patents.

sencore

Sencore, Inc., manufacturers of time-saving test equipment, has announced a deluxe, broad-band, highly sensitive oscilloscope. The new scope, model number PS127, requires no narrow band due to the high sensitivity of .017 volts RMS for one-inch deflection on broad band. The PS127 is simple in design but offers features of scopes costing hundreds of dollars more, such as Z axis modulation and direct plate connections on the rear. The low frequency is down only 3 DB at 10 cycles, offering a superior scope for video work as well as Audio.



George M. Frese

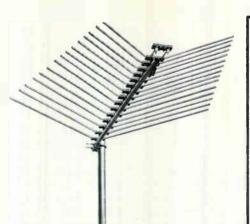
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N. A. T. E. S. A. REPORT

By Clyde Ellis, Washington Governor

Dear Jack:

First of all I would like to express my appreciation for the excellent coverage you gave to my article about the NATESA Convention that I attended in Chicago. I have had many unexpected comments on the article (one from Alaska), and I realize more than ever that your publication is not only reaching the electronics trade, but is being read with considerable interest.

I wonder if you would help me convey to your readers some of my enthusiasm about the National Alliance of Television & Electronic Service Associations. I know that TV Technicians who own shops in the Northwest have a real friend in NATESA. I have found the organization to be an unselfish friend that is of great help in expanding the morale and self-respect of the independent TV technician, and thereby improving his business. NATESA is in effect a "do it yourself operation," with many years of experience to its credit. I am sure that most TV repair shop owners believe in some sort of local trade association. Too many of these organizations have had the tendency to build up and die out over a period of years like the ebb and flow of the tide. I know that the National Alliance fulfills a real need in binding local groups together, or giving invaluable aid in forming a local association without loss of local autonomy.

If I can be of any help, or answer any questions about NATESA, just have your readers drop me a card or letter. I'll answer it and get them in touch with the proper officer in their area.

Very truly yours,
Clyde W. Ellis
President, King County TSA
Washington Governor NATESA
Reply to: Ellis TV, 6412 Califor

Reply to: Ellis TV, 6412 California Ave. S.W., Seattle, Wn. 98116

Editor's note: Clyde is one of the real oldtimers in the service industry hereabouts with a background dating back to the days of the old Radio Research Society which flourished in the '30s here and in Portland. Many of the oldsters will also remember him as the editor and publisher of the Radio Technician, a little news publication which was fairly widely distributed here in the Northwest. Clyde is presently Washington Governor for N.A.T.E.S.A., and president of T.S.A. King County, a N.A.T.E.S.A. Affiliate. He plans on extensive travel in his association activites, and stands ready to assist any group in any way he may. Give Clyde a call, or drop him a note for assistance in your organization. If Clyde can't help you, he knows the person who can.-J.W.

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New Channel 8 Station Anticipated For Missoula

Dale Moore, President of Western Broadcasting Co. of Missoula, Montana, has announced plans of his company to construct a new television station in Missoula, Montana. The station, if approved, would operate on channel 8, with a power of 316,000 watts and would be the first full power station in western Montana. Engineering studies are completed and the application is either now on file, or soon will be filed.

Indications are that the station, if approved, will have the highest antenna in the United States, if not in the world, with its antenna location at something over 8,000 feet above sea level.

WHO SAYS "YOU CAN'T TEACH AN OLD DOG"?

Ground Hog day has come and departed, so spring can not be far behind and many persons are beginning to plan for their summer activities.

This seems a good time to relate the "Saga of the Jumping Earls."

A good many people in the industry here in the Northwest and some few in other parts of the country have heard scraps of conversation regarding the exploits of this pair, and have put it down to one or more of things like: mild insanity, senility, idiocy, or just plain fabrication . . . Lies, that is.







We must confess that we ourselves ran the gamut of all of these possibilities when first advised of this activity. Some hint of our attitude msut have leaked back to the Earls (all we said was, "you surely don't expect me to believe that?"), because they have come up with irrefutable evidence in the form of photos, and ye olde editor is now looking for a crow which is not too tough for these old incisors to masticate.

Top photo shows Bill Jr., just leaving that nice comfortable airplane, on the way down. Center is Bill Sr., all alone betwixt earth and sky, snapping pictures like mad. Bottom shows the intrepid jumpers, in one piece, on the ground following their jump and looking happy. (Who wouldn't?)

The story goes back to the completion of a flying course on the part of Bill Earl, Jr. Bill, being a very careful fellow, especially where flying is concerned, felt that roller skates were of no help in case of trouble, and that he should have some way to get down if the airplane decided to shorten the trip. To this end, he took some parachute instruction and found it to be pleasantly exhilirating, so Bill Sr. decided to try it (Sr. will never

see forty again), much to the amazement and concern of the instructor, but try he did, and likes it fine. We now have the only father-son jump team in the electronic industry. The two Bill Earls, of Don H. Burcham Company, Portland office.

Worry? Not at all. Both Bills say there is nothing to worry about. It is fool-proof, and anyhow the parachutes are fully guaranteed. You can get an immediate replacement, or refund on a faulty one and no questions asked.

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1964 IEEE INTERNATIONAL CONVENTION OPENS MARCH 23

The 1964 IEEE International Convention will be held from March 23 through 26 at the New York Hilton Hotel and New York Coliseum in New York City. Encompassing the full scope of IEEE technical activities for the first time, the Convention features a 20 per cent increase in number of technical papers as well as about the same increase in number of exhibitors. This year's Convention theme is "A Glimpse of the Future."

The world's largest technical meeting and exhibition is expected to draw an attendance of more than 75,000 engineers and scientists from 40 countries. Convention headquarters will be in a new location, the recently completed New York Hilton Hotel, situated a convenient six blocks from the Coliseum.

The increased technical program, consisting of 320 papers covering the latest developments in every area of electrical and electronics engineering, will be presented in 64 technical sessions. The high point of the program will be a special evening symposium on "Modular Magic" to be held Tuesday eveing, March 24 at the Hilton. A panel of outstanding authorities, moderated by Patrick Haggerty, President, Texas Instruments, Inc., will discuss the impact of processes and techniques for fabricating microelectric integrated circuits.

More than 1000 exhibitors will display some \$200 million worth of the latest electrical and electronic equipment, most of it for the first time. The Show will be in two locations with electrical equipment on display at the Hilton and electronic exhibits housed on all four floors of the Coliseum.

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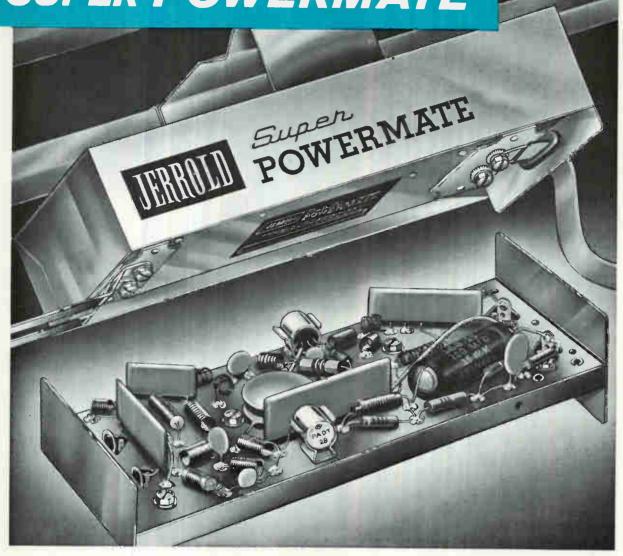
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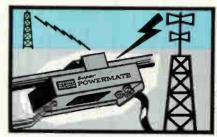


BREAKS THE GAIN OVERLOAD BARRIER

Servicemen and the public long wanted it, but were told they couldn't have it-a transistorized TV antenna preamplifier with the overload capacity to handle local signals without sacrificing the gain that brings in distant stations.

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