

HEINL RADIO BUSINESS LETTER

2400 CALIFORNIA STREET

WASHINGTON, D. C.

CONFIDENTIAL — Not for Publication

RECEIVED
MAR 27 1935

INDEX TO ISSUE OF MARCH 26, 1935.

Technical Radio Societies To Meet Jointly In April.....	2
Press Radio Reports Little Unfavorable Criticism.....	3
New Ionized Layer 450 Miles Above Earth Discovered.....	4
Broadcasters Favor Mead Revise, But Not Copeland Bill.....	5
Don Flamm Gets Undreamed Of Sustainer.....	6
All-Time Record Sales Of Radio Sets In 1934.....	6
Germany Tries Out Television.....	8
RMA Annual Convention Set For June In Chicago.....	9
FCC Head Congratulates Bowes On Amateur Hour.....	9
A. T. & T. Denies Leased Wires Hurt Telegraph Business.....	10
Strike At Crosley Radio Plant.....	10
Industry Notes.....	11
"WGY News" Makes Its Bow.....	12
Columbia New Accounts.....	12

No. 810

Handwritten notes and signatures at the bottom left of the page.

March 26, 1935

TECHNICAL RADIO SOCIETIES TO MEET JOINTLY IN APRIL

A joint meeting of the Institute of Radio Engineers and the American Section of the International Scientific Radio Union will be held in Washington on Friday, April 26. There will be two sessions at the National Academy of Sciences, beginning at 10 A.M. and 2 P.M. Papers will be limited to 15 minutes each to allow time for discussion. The following are listed:

"The London General Assembly of the International Scientific Radio Union", by J. H. Dellinger, National Bureau of Standards.

"Further Results of a Study of Ultra-Short-Wave Transmission Phenomena", by C. R. Englund, A. B. Crawford, and W. W. Mumford, Bell Telephone Laboratories.

"Experiments with Ultra-High-Frequency Transmitting Antenna in Close Proximity to the Ground", by H. Diamond and F. W. Dunmore, National Bureau of Standards.

"Ionospheres Measurements during the Partial Eclipse of the Sun of February 3, 1935", by J. P. Schafer and W. M. Goodall, Bell Telephone Laboratories.

"The Graphical Analysis of a 10,000-hour Kennelly-Heaviside Layer Record", by Harry Rowe Mimno, Harvard University.

"Recent Ionosphere Measurements in the Southern Hemisphere", by L. V. Berkner, H. W. Wells, and S. L. Seaton, Carnegie Institution of Washington.

"Some Continued Observations of Ultra-High-Frequency Signals over Long Indirect Paths", by Ross A. Hull, American Radio Relay League.

"Terrestrial Magnetism and Its Relation to World-Wide Short-Wave Communications", by Henry E. Hallborg, RCA Communications, Inc.

"Radio Propagation Over Spherical Earth", by C. R. Burrows, Bell Telephone Laboratories.

"Direction-Finding of Atmospherics, by John T. Henderson, National Research Council of Canada.

"Theoretical Explanation of Published Measurements of Vertical Plane Radiation Characteristics of High Vertical Radiators", by K. A. MacKinnon, Canadian Radio Broadcasting Commission.

"Some Developments in Low Loss Inductances", by F. E. Terman, Stanford University.

"Measurement of High-Frequency Impedance with Networks Simulating Lines", by W. L. Barrow, Massachusetts Institute of Technology.

"The Accuracy of the Low-Voltage Cathode-Ray Tube for Oscillographic Radio Measurements", by L. E. Swedlund, Westinghouse Electric and Manufacturing Co.

"The Detection of Frequency Modulated Waves", by J. G. Chaffee, Bell Telephone Laboratories.

"A Novel Modulation Meter", by H. N. Kozanowski, Westinghouse Electric and Manufacturing Co.

"On the Nature of Transmitter Key Clicks and Their Suppression", by A. Hoyt Taylor and L. C. Young, U. S. Naval Research Laboratory.

"Grid Dissipation as a Limiting Factor in Vacuum Tube Operation", by I. E. Mouromtseff and H. N. Kozanowski, Westinghouse Electric & Manufacturing Co.

Supplementary program papers will be presented as follows if time permits:

"A Graphical Aid in the Design of Networks for Distortion Correction", by E. A. Guillemin, Massachusetts Institute of Technology.

"The Directive Antenna of KYW Station" by R. N. Harmon, Westinghouse Electric & Manufacturing Co.

"Industrial High Frequency Generators Using Vacuum Tubes", by H. V. Noble, Westinghouse Electric & Manufacturing Co.

"A Method of Measuring the Inductants of an Air Condenser at Frequencies Ranging from 1 to 5 Mc" by R. F. Field, General Radio Company.

X X X X X X X X X

PRESS RADIO REPORTS LITTLE UNFAVORABLE CRITICISM

Summarization of the Press-Radio Bureau's fan mail, solicited March 1 on the bureau's first anniversary, reveals that 1,748 responses were received up to March 18, only 15 of which contained adverse criticism. Since March 18 several hundred more answers have been received, but have not been tabulated.

Of the total tabulated, 315 were letters and 1,433 post-cards; of these, 971 came from cities and 775 from rural districts. The National Broadcasting Company and its affiliated stations contributed 1,577 pieces of the mail, and the Columbia Broadcasting System 162 pieces.

The regional distribution was as follows: New York City, 124; Middle Atlantic States outside of New York City, 570; New England States, 205; Southern States, 383; Midwestern States, 423; Mountain States, 26; Pacific Coast States, 1; Canada, 11; Foreign, 4.

X X X X X X X X X X

NEW IONIZED LAYER 450 MILES ABOVE EARTH DISCOVERED

A new ionized layer in the atmosphere, at a height of approximately 450 miles above the earth's surface, has been discovered by scientists in the radio section of the National Bureau of Standards, who for 18 months made weekly measurements of the virtual heights and critical frequencies of the ionosphere.

This new layer, which returns radio energy from a greater virtual height than the F_2 layer, has been tentatively called the G layer. It appears after the frequency of the signals from the sending station has been increased above the critical frequency for the F_2 layer. The radio signals then penetrate the F_2 layer and are returned to the recording apparatus by the still higher G layer, it was stated.

In these studies, the seasonal and diurnal variations of the critical penetration frequencies for the three major layers of the ionosphere, the E.F.1 and F_2 layers, received particular attention. There appears to be no doubt, according to the Standards Bureau, that the ionizing force of the sun exerts a major effect in the formation of these layers during the daytime but the complete behavior of these layers is complex and their ionization is not always simply related to this force.

A seasonal variation of the F_2 critical has been found, with maximum noon penetration frequencies about November 1 and March 1. The frequent absence of critical frequencies for this layer, above 5,000 kilocycles per second during mid-day in Summer, may be the result of a transfer of ions from the F_2 to the F_1 layer.

A "sporadic E" layer has also been noted. This appears with a pulse retardation approximately that of the E layer, but for much higher frequencies. Energy from this layer is believed to be returned by reflection rather than refraction. A theory that the "sporadic E" layer was formed by the strong electric fields of nearby thunderstorms had been advanced in England. A comparison was made of the occurrences of local thunderstorms and "Sporadic E" layer but no correlation was found, it was stated.

X X X X X X X X X X

BROADCASTERS FAVOR MEAD REVISE, BUT NOT COPELAND BILL

There have been several important developments in the Food and Drug Bill situation. President Roosevelt in a special message to Congress urged that a new pure food act be passed. At the same time, by a vote of 9 to 6, the Senate Commerce Committee favorably reported the Copeland Bill. Almost at the same time, Representative Mead (D), of New York, offered a revised version of a Food and Drug Bill he had previously introduced. While President Roosevelt did not specify the Copeland Bill or any other measure, it is the belief that while the Senate may pass the Copeland Bill, the House will pass the Mead Bill.

Broadcasters continue to oppose the former bill and would much prefer to see the latter enacted.

"The form in which the Copeland Bill was reported favorably to the Senate by the Committee on Commerce shows very little change from the draft which was considered at the hearings before the subcommittee", Henry A. Bellows, Chairman of the Legislative Committee of the National Association of Broadcasters, said when his views on the subject were sought. "Among the points specifically covered in testimony on behalf of the broadcasting industry, the one which provides that a retail dealer doing a purely local business may not be prosecuted under this Act for any advertising except by radio broadcasting, remains unchanged. This is a direct and utterly unjust discrimination against radio. It is obviously useless, since broadcasting is interstate commerce, and thus every advertisement by radio necessarily falls within the provisions of this Act. Apparently the Committee, acting on the suggestions of local newspapers has simply tried to suggest to local advertisers that they may get into trouble if they use radio but they can safely use any other kind of advertising including the United States mail. The broadcasters will beyond question vigorously oppose the Copeland Bill as long as this unjust discrimination remains in it.

"The most important improvement in the latest draft of the Copeland Bill from the standpoint of broadcasting, is the elimination of the provision in the earlier draft that the Secretary of Agriculture might at any time extend the list of diseases for which claims of therapeutic value could be made for drugs. This provision would have given the Secretary of Agriculture, or some subordinate in the Department, practically unlimited authority over all advertising of drugs, and the broadcasters protested against it on that ground.

"The revised version of the Mead Bill is not fundamentally changed from the earlier draft, but contains certain conditions suggested by the Federal Trade Commission. From the standpoint of the broadcasters the main difference between the Mead and the Copeland Bills is that the Mead Bill has clearer and more accurate definitions, and that it provides the existing

machinery of the Federal Trade Commission for the enforcement of the regulations against false advertising instead of setting up a new and utterly untried system. Since the Copeland Bill does not deprive the Federal Trade Commission of any of its present authority, its enactment would simply mean that broadcasting would be subject to a third regulatory body in addition to the two, the Federal Communications Commission and the Federal Trade Commission, which now have authority to regulate it."

The vote on the question of reporting the bill to the Senate was:

For - Copeland, Fletcher, Shepard, Maloney and Radcliffe, Democrats; McNary, Vandenberg, White and Gibson, Republicans.

Against - Bailey, Clark, Murphy, Bachmann, Donahey and Guffey, all Democrats.

Senator Bennett Champ Clark, of Missouri, protested so early a vote and reserved the right to file a minority report.

X X X X X X X X

DON FLAMM GETS UNDREAMED OF SUSTAINER

The New York Cheese Club last Monday at its weekly luncheon had a turnout including David Sarnoff, M. H. Aylewsoth, A. J. McCosker and Donald Flamm.

"Since Flamm's WMCA broadcasts all Cheesers' luncheons", Variety reports, "The WMCA president observed in his speech:

"'I never thought I'd live to see the head of RCA, the president of NBC and the president of WOR doing a sustaining on WMCA.'

"The gag broke up the lunch."

X X X X X X X X

ALL-TIME RECORD SALES OF RADIO SETS IN 1934

Reaching for new records in domestic sales of home and auto radio receivers, and attaining a new all-time high point in total set sales, as well as in exports to other lands, the American radio industry forged ahead in 1934 in a most encouraging and impressive manner. Complete statistics in Electronics for March show that nearly 4,700,000 sets were made and sold by American manufacturers during the year just past. Of these slightly over 4,000,000 went into domestic homes and automobiles, and something over 600,000 went abroad. The sum total of sets manufactured

during the year is the best figure attained in any year since the birth of the industry in 1920 - not excepting the momentous year of 1929.

American manufacturers made 65,000,000 tubes of which 10,000,000 went abroad. The average radio purchased in 1934 cost the buyer \$45.50 - this included 6.5 tubes at an average price of \$1.30. Thus the manufacture and sale of radio sets produced a total retail volume of business amounting to over \$200,000,000. Tube sales amounted to \$70,000,000, and with sales of other radio apparatus brought the total amount of annual radio business in 1934 to approximately \$300,000,000.

According to Dun & Bradstreet, October 1934 showed the highest sales in broadcast history up to that month (they may have been exceeded since), when the income was \$4,527,000, a gain of over 50 per cent over the year before. For the first ten months of 1934 total sales amounted to \$33,780,000 (major networks only) or 38.8 per cent ahead of 1933, and actually 2.2 per cent ahead of 1932 when the figure reached a previous all-time high.

The only downward pointing curve is the sale of tubes for domestic replacements. The figures shown in the tables given were arrived at in the following way: data from all sources show that 6.5 tubes went into every new American radio set; 5 into each set that went abroad. Thus for initial equipment 36,240,000 tubes were required, leaving 28,642,000 tubes for replacement purposes, a smaller number than were sold in 1933 for the same purpose.

Dun & Bradstreet report that failures were less in 1934. For the first eleven months of 1934 only 6 manufacturers failed with liabilities of about one-half million dollars; in 1933 there were 25 failures involving \$3,719,519.

Sales of automobile radio sets during 1934 totaled 780,000, just about duplicating the sales of auto radio in the preceding year.

The outlook for auto-radio sets for 1935 is about the same as for 1934, three-quarters of a million sets, with half or more of these sold to the automobile makers for initial installation when the cars are built.

A new all-time record for exports of radio equipment from the United States was recorded for 1934 when sales abroad were valued at \$24,856,898 compared with \$16,125,719 in 1933. Overseas sales of radio equipment during the year exceeded by \$1,723,083 the former record sales of 1930, it was stated.

Exports of all classes of radio equipment during 1934 increased compared with 1933. Foreign sales of radio transmitting sets, parts and tubes were valued at \$1,090,269 compared with \$743,423 in the preceding year, an increase of 47 per cent; receiving sets were valued at \$15,338,143 against \$9,323,535, or 65 per cent; components, \$4,358,350 against \$2,783,730, or 56 per cent; receiving tubes \$3,210,729 against \$2,623,261, or 22 per cent; loudspeakers, \$361,076 against \$338,055, or 7 per cent, and other accessories, \$498,331 against \$313,725, 59 per cent.

X X X X X X X X

GERMANY TRIES OUT TELEVISION

Advices from Berlin are that the Germans began television transmission last Saturday (March 23). A previous dispatch had announced that the transmitting station would be located in the Berlin Exhibition grounds in the suburbs and that it would operate three evenings a week within a 30-mile radius.

Plans for the proposed television broadcasts were set forth as follows:

"Receiving sets already are on sale at some radio stores. The government will place sets at central points to familiarize the public with the experiment. One will be at the Reich Postal Museum, on a busy corner in the centre of the city.

"Programs will consist of news reels and old films retired from use in moving-picture houses.

"The experimental group will also have at its disposal a radio film car to visit various parts of the city to record significant events and Nazi demonstrations. The films will be rushed to the sending station.

"There is some discussion of a plan by which all Central Germany could be served by placing a station at Brocken, the highest point in the Hartz Mountains, connected with the Berlin control room."

Having broadcast the name of Hitler into practically every home, the idea seems to be to do the same thing with his picture.

Dr. Paul J. Goebbels, Minister of Propaganda, has announced that after October 1st the broadcasting of advertising from radio stations will not be permitted. Dr. Goebbels said the reason for this was because of the "incompatability" of radio advertising with the political and more important newspaper advertising and window display. He added that the elimination of advertising would allow the stations to concentrate "on the cultural tasks of broadcasting."

X X X X X X X X

RMA ANNUAL CONVENTION SET FOR JUNE IN CHICAGO

The Eleventh Annual Convention of the Radio Manufacturers' Association will be held June 11 and 12 in Chicago, the Board of Directors decided at their New York meeting last Thursday. Paul B. Klugh, of Chicago, will again be Chairman of the convention and entertainment committee.

A general policy regarding public radio and electrical shows was adopted by the RMA Board under which the Radio Manufacturers' Association will not sponsor or support any public radio and electrical show in any city.

"While strictly 'local' radio shows are not disapproved", Bond Geddes, Executive Vice-President of the RMA, states, "it is felt that Association sponsorship of any show carries with it a national character, attracts distributors and dealers, and the result is that sales before the show period are retarded with a resultant loss of business."

The Board's policy is advisory to members but leaves each company free to take such action as it may desire regarding show exhibits.

As a result of this, Bond Geddes advises that the Association has declined to sponsor either the National Electrical and Radio Exposition at Grand Central Palace next September or the Radio Show in Madison Square Garden.

X X X X X X X X

FCC HEAD CONGRATULATES BOWES ON AMATEUR HOUR

Showing that he is taking some notice of programs Chairman Anning S. Prall, of the Federal Communications Commission, sent a telegram of congratulation to Major Bowes on the inauguration of Amateur Night last Sunday.

Gene Buck, President of the American Society of Composers, got the big laugh of the evening by sending Major Bowes a wire which read:

"Congratulations but don't forget that as master of ceremonies you are only the punk that lights the fireworks."

More than 160 persons and 250 telephone trunk lines were required to handle the calls received in New York and Chicago during this Amateur Hour.

X X X X X X X X X

A. T. & T. DENIES LEASED WIRES HURT TELEGRAPH BUSINESS

C. F. Craig, General Manager of the Ling Lines Department of the A. T. & T. denied that the growth of their leased wire had interfered with the telegraph business, at the telegraph hearing held at the Communications Commission yesterday (Monday).

Mr. Craig said that from one private line, in 1887, the leased wire service had grown to more than 1,000. Morse and teletype machines were used in practically every business and widely among government departments.

Howard L. Kern, counsel for the Postal, and J. C. Willever, Vice-President of the Western Union, criticized the leased wire principle, the latter declaring that if telegraph companies were to continue to render a comprehensive and satisfactory telegraph service, they should "be protected from the undue dilution of their traffic, which can only be done through the adoption of adequate restrictions against misuse of the leased wire principle."

Chairman Stewart of the Commission announced that a study of the press leased wire system would not start until after that on private leased wire contracts had been concluded, probably not until early next week.

X X X X X X X X

STRIKE AT CROSLY RADIO PLANT

A strike began at the Crosley Radio plant in Cincinnati Monday morning. By nightfall two persons had been reported injured, a striker had been arrested, and scuffles had become numerous as workers sought to get home through throngs of strikers and sympathizers, according to an Associated Press dispatch.

B. A. Hoff, leader of the Radio and Refrigerator Workers' Union, estimated the strikers at 3,000.

The union, he said, seeks recognition as a bargaining agency, a 36-hour week with time and a half for overtime, granting of seniority rights and work guarantees.

Lewis Crosley, Vice-President and General Manager, countered that the concern "is complying both with the letter and the spirit of the law" and asserted it had made no efforts to interfere with union organization of its employees. He said that 1040 of the plant's normal force of 3400 remained at their jobs.

X X X X X X X X

::::
 ::::INDUSTRY NOTES::::
 ::::

An increase in the value of inventories from \$45,467,409 to \$51,313,973 in 1934 was the principal reason for a rise in current assets of the General Electric Company, which stood at \$177,269,050 at the end of 1934, compared with \$175,314,394 a year before, according to the annual report.

A net loss of \$7,751,548 is reported by the Western Electric Company, Inc., in its report for 1934, comparing with a loss of \$13,772,504 in 1933. Total sales were \$91,807,396, against \$69,510,882, while costs, taxes and depreciation were \$98,481,160, against \$81,905,161, resulting in an operating loss of \$6,673,764, compared with \$12,394,279 net loss on sales in 1933.

The annual report of the Arcturus Radio Tube Company for 1934 shows a net loss after taxes, depreciation and other charges, \$52,004, against \$26,142 loss in 1933.

Following a reorganization Linus Travers, Director of Commercial Productions of the Yankee Network will supervise the network's Artists Bureau, and Van D. Shelton will be its Director.

The full text of the British Television Commission report is printed in the March issue of Electronics.

The Commerce Department has issued "Radio Markets Supplements" for India, El Salvador and Danzig. These may be had for 25¢ each by writing to Andrew W. Cruse, Chief of Electrical Division, Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, D. C.

David Sarnoff and M. H. Aylesworth have been reelected Directors of the Motion Picture Producers and Distributors' Association.

X X X X X X X X

"WGY NEWS" MAKES ITS BOW

A new house organ, the "WGY News" has just been started. The "News" has for its slogan, "50,000 Watts in the Heart of the Great Northeast". It is tabloid size, is illustrated and the first issue was four pages.

A typical item from the "News" follows:

"We can't say the people of the WGY market are 'bloated plutocrats.' Very few of them are fabulously rich. But altogether they represent a pretty healthy buying power. In fact, it's 39 per cent higher than the United States average, and represents a tune on the retail cash registers of this area of 1,680,000,000 dollar notes every year. Why not try that tune on YOUR piano, or whatever it is you sell!"

X X X X X X X X

COLUMBIA NEW ACCOUNTS

Kleenex Company, Chicago, Ill., (Kleenex tissues and Quest deodorant); Starts - April 2, 1935; Monday to Friday, inclusive, 11:15 to 11:30 A.M. EST and 11:45 to 12 noon EST; Network - April 2 to June 3) Baltimore, Boston, Buffalo, New York, Philadelphia, 11:15 to 11:30 A.M.) Providence, Syracuse, Washington - 8 stations; April 2 and thereafter 11:45 to 12 noon - 27 stations coast to coast; June 4 - all stations above at 11:45 time no 11:15 A.M. broadcast after June 3; Originates - WBBM, Chicago; Program - Mary Marlin - dramatic sketch; Agency - Lord & Thomas, Chicago, Ill.

Household Finance Corp. of New York, Chicago, Ill., Starts April 1, 1935, Monday and Wednesday, 6:30 to 6:45 P.M. EST, WABC only; Originates WCAU, Philadelphia; Program - Concert orchestra under direction Anthony Candelori and male soloist; Agency - Charles Daniel Frey Co., Chicago, Ill.

(Renewal) Ford Motor Company, Detroit, Mich., Starts April 7, 1935; Air time - Sunday - 9 to 10 P.M. EST; Network - 90 stations coast to coast; Originates - Orchestra Hall, Detroit, Mich., Program - Ford Symphony Orchestra conducted by Victor Kolar; Agency - N. W. Ayer & Son, Inc., New York.

(Renewal) Sterling Products, Inc., Wheeling, W. Va.; (Bayer's Aspirin and Phillips Dental Magnesia); Starts April 2, 1935; Tuesday - 8 to 9 P.M. EST; Network: Bayer's Aspirin 8 to 8:30 22 stations; Magnesia 8:30 to 9 P.M. - 25 stations; Originates WABC, New York; Program - Bayer's Lavender and Old Lace, Frank Munn, Bernice Clair, Gus Haenschen Orchestra; Magnesia - Melodiana - Vivienne Segal, Oliver Smith, Abe Lyman's orchestra; Agency - Blackett-Sample-Hummert, Inc., New York.

X X X X X X X X