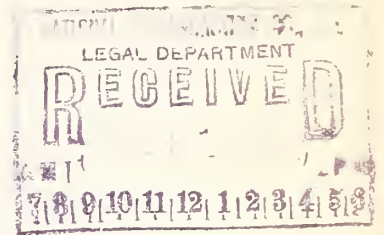


HEINL RADIO BUSINESS LETTER

2400 CALIFORNIA STREET

WASHINGTON, D. C.



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WILLKIE HAS CONVINCING AGGRESSIVE RADIO VOICE

Any fears of his adherents as to whether or not Wendell Willkie had the radio voice to compete with President Roosevelt were entirely put at rest by the success of Mr. Willkie's Indiana broadcast. As much a novice in radio as in politics and entirely different from President Roosevelt in every respect, quality of voice, middle Western accent, aggressive rough and tumble, chip on the shoulder hard hitting fighter, Wendell Willkie apparently delighted the radio people with his possibilities in the forthcoming campaign where the man who was the most convincing over the radio may win.

Broadcasters because of the strangle hold the Government has on them through the control of their stations were naturally shy about being quoted in a comparison of President Roosevelt and Mr. Willkie, but it may be safely said that the Elwood broadcast demonstrated to their complete satisfaction that the latter could hand it back to the President over the radio as good as it was sent. And didn't they prick up their ears when Willkie, the tough old jury lawyer, suggested a series of Lincoln-Douglas joint debates. Wouldn't that be something to put on the air, the broadcasters said.

At that Mr. Willkie was heard under difficult conditions last Saturday. Wilted by the 102 degree heat, voice husky from the 48 hour seige of personally greeting home folks, irked by having to read his speech when he knew he could do much better without a manuscript, and facing a radio audience which had been addressed at too great length by Representatives Halleck of Indiana and Joseph Martin of Massachusetts, the odds were against the nominee. Ordinarily, Halleck and Martin, both good speakers, would have been listened to with interest but on this occasion with them rehashing a lot of stuff about Willkie that everybody already knew by heart, the radio audience was a good deal in the frame of mind of a sports crowd sitting through the bouts of the preliminary fighters and restlessly awaiting the champs.

No orator, Mr. Willkie seemed to be very successful in projecting his fighting personality through the etherial waves to what was probably one of the greatest daytime audiences in the history of radio. In addition to his aggressiveness and confidence, the speaker unquestionably got across to his radio listeners, the air of sincerity which so impresses those who meet him in person--that he is not merely a promiser but a doer.

The difference between Mr. Willkie's Middle Western accent and the polished Eastern accent of President Roosevelt was very marked over the air. The Republican nominee had a way of collapsing the first syllable of words such as "Plitical" (political), "rligion" (religion) and "bleve" (believe). His manner of speech was typically Hoosier despite long residence in the East.

Although coming along as a trailer and evidently in commercial time immediately following Mr. Willkie's speech was an entirely new radio salesman par excellence. Instead of selling watches or soap, this youthful super salesman of the air took the opportunity to hit the iron while it was hot for Wendell Willkie and the Associated Willkie Clubs which are being so rapidly organized. It was no other than Orrin Root, Jr., the young Princeton graduate. Credited with being one of Willkie's earliest discoverers and now organizing Willkie Clubs throughout the country. Mr. Root seemed to have everything it takes to get himself over the air and if thousands didn't sign on the dotted line after his earnest talk in behalf of Mr. Willkie and the Willkie Clubs, it would surprise this observer. Evidently Mr. Root is a young man Mr. Ted Church, Radio Director of the Republican Committee, shouldn't overlook because the boy is really good and sounded over the air as if he really believed what he said.

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FURTHER FCC LEGAL RESTRICTIONS

The Federal Communications Commission amended Section 1.38 of its Rules of Practice and Procedure by designating the existing rule as subsection (a) and by adding an additional subsection reading as follows:

"(b) No member, officer or employee of the Commission (1) whose active service with the Commission has terminated but who is receiving pay while on annual leave not taken prior to separation from such active service, or (2) who is in any other leave status, shall appear as attorney or participate in the preparation or handling of any matter before, or to be submitted to, the Commission."

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U.S. SHIPPING IN ARGENTINA RADIO SALES

Argentina continues to be one of the largest foreign markets for American radio materials, although the value of United States radio exports to that country has declined from the 1937 record level of \$2,621,806 to \$1,859,216 in 1938 and \$1,376,264 in 1939.

Local radio reception is good on the medium waves, while short wave reception is normal, and depends largely on the transmitting station. American stations have recently improved in signal strength, but are still not quite as strong as German or British Stations.

The least satisfactory period for short wave reception is the summer months of December, January, and February. From 4 to 6.30pm is the worst time of the day for local reception of short wave. There is also fading in the north-south circuit from 12.30 to 1.30pm. Reception is very good from 7 to 11 pm from almost any direction.

A consensus of the most reliable estimates would indicate that there are between 1,000,000 and 1,050,000 receiving sets in use in Argentina. About 250,000 sets are sold each year. The principal season each year is from April to October.

The domestic radio industry is well organized, and virtually all of the receiving sets are now produced within the country. The local manufacture of parts is also substantial, although the sale of components continues to account for the largest share of the United States trade. Imports of American tubes have declined in recent years, partly owing to increasing activity on the part of local tube assembler.

The principal competitor of American lines is the Dutch company, Philips, which is active in all phases of the radio field, and which is continuing with its endeavors to dominate this market.

The Republic of Argentina has an area of over 1,000,000 square miles, extending 2,300 miles from north to south and being about 1,000 miles across the widest part. If compared with the Northern Hemisphere, Argentina would extend from Labrador to Cuba, and Buenos Aires would be located at about the same latitude as Little Rock, Arkansas.

Population is estimated at approximately 13,000,000 about three-fourths of which is urban.

The city of Buenos Aires, with a population of 2,500,000 and its immediate vicinity, account for about half the Argentine radio sales.

There are two important station chains in Argentina. "Radio El Mundo" broadcasts daily in conjunction with 11 other stations in the interior, which "Radio Belgrano" works with 8 other stations in Argentina and one in Uruguay. These chain programs are available up to a total of seven hours daily. "Radio Excelsior" programs are also occasionally transmitted from LT8 in Rosario.

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A new 16-page short-wave station guide which lists several hundred stations throughout the world, revised since the European War began, together with their frequencies and call letters, has been prepared by the broadcasting division of the General Electric Company.

The book is being offered gratis to listeners of the company's international stations and since the first announcement less than a month ago, more than 2,00 requests have been received from Latin and South America. The guide also includes operating schedules of stations and a world-wide time map comparing times of the world with Eastern Standard Time. It is printed in English, Spanish and French.

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TELEVISION SETS JANUARY 1 AS GOAL

The National Television Systems Committee, organized in New York last month, is expediting its technical studies under the leadership of Chairman W. R. G. Baker, with January 1 as an informal goal.

The Industry Committee has been completed through the appointment of three additional members: Ray H. Manson to represent the Stromberg-Carlson Telephone Mfg. Co., Dr. Ralph Brown of the Bell Telephone Laboratories, and President Paul R. Raidbourn of Television Productions, Inc., New York, a subsidiary of Paramount Pictures.

Nine "panels", or subcommittees, of research and technical experts are completing their personnel and arranging their programs of technical studies and transmitter experiments. B. Ray Cummings of Fort Wayne, Ind., has been appointed chairman of the "panel" on Transmitter Characteristics in place of Philo T. Farnsworth, thus completing the organization of the "panel" chairmen.

A meeting of the "Panel" Chairmen will be held on Wednesday, August 21, in New York City, for the purpose of detailing the program of each "panel" and outlining the various steps and time necessary for the study of each problem. Many other meetings of subcommittees, or "panels", of the Industry Committee will be held next month.

In accordance with the decisions arrived at the first meeting of the National Television Systems Committee as held in New York City last month on the study of the wide range of technical problems undertaken by the committee and its component panels is under way. The organization of the personnel of the panel, or subcommittee, on Coordination of Transmitters and Receivers is complete and the work in this field has begun.

This panel has been organized under the chairmanship of I. J. Kaar of the General Electric Company to study and report on the essential factors of coordination in the design and operation of television transmitters and receivers. Among these are included such matters as the degree of pre-emphasis to be employed in the sound channel of the transmitter and the corresponding degree of deemphasis to be given the sound channel in the receiving equipment; the basically similar treatment to be given the video sidebands in the transmitter and the corresponding treatment to be given in the receiver; and associated or similar problems.

For this work the following group of engineers have been appointed by Dr. Baker, chairman, to work with Mr. Kaar:

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E. F. W. Alexanderson, General Electric Company, Schenectady; R. D. Kell, RCA Victor Company, Inc., Camden; F. J. Bingley, Philco Radio & Television Corp., Philadelphia; N. P. Case, Hazeltine Service Corporation, New York; J. N. Dyer, Columbia Broadcasting System, New York, and T. T. Goldsmith, Allen B. Du Mont Laboratories, Passaic.

Also, M. Cawein, Farnsworth Radio & Television Corp., Fort Wayne, Ind.; A. G. Jensen, Bell Telephone Laboratories, New York; H. R. Lubcke, Don Lee Broadcasting System, Los Angeles, George Towne, Stromberg-Carlson Telephone Mfg. Co., Rochester; Paul J. Larsen, Baird Television Corp., East Orange; Herman Greenberg, Fulton Radio Corp., New York; and D. D. Israel, Emerson Radio & Phonograph Corp., New York.

This group will make extensive studies of all aspects of the problems allocated to this panel and develop from these studies those practices that will provide the best national system of television broadcasting.

This panel on Transmitter-Receiver Coordination is but one of the nine panels in whose hands the study and development of the engineering essentials of a suitable national television system have been placed. The organization of the personnel and the work of all of these panels are proceeding rapidly and it is anticipated that this division of the work of the National Television Systems Committee and the application to the many problems of substantially all of the specialized skills which the nation affords will result in their early and satisfactory solution.

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RADIO DRAFTSMEN AND SIGNAL CORPS INSPECTORS SOUGHT

The United States Civil Service Commission announces examinations of interest to persons trained in radio engineering work as follows:

Engineering Draftsman, five grades, salaries ranging from \$1,620 to \$2,600 a year. The optional branches of drafting include electrical and radio. Applications must be on file with the Civil Service Commission, not later than September 12.

Applications will also be received and rated until further notice by the Civil Service Commission for the positions of Inspector, three grades, Signal Corps Equipment, salaries ranging from \$2,000 to \$3,200 a year. These examinations are announced for the Signal Corps, War Department, for duty in the field. Applicants must show 4 years of college study leading to a bachelor's degree in electrical or radio engineering. In addition, for the Senior Inspector and Inspector grades, they must have had experience in the inspection and/or testing of varied signal corps equipment,

radio, telephone, telegraph, and power units, etc., to determine compliance with specifications. An additional year of inspectional experience may be substituted for each year lacking of the required college education; engineering experience in the field of communication and/or navigational radio work may be substituted for the engineering experience, except that for the Senior grade at least one year of inspectional experience must be shown.

Application forms and information may be obtained from the Secretary, Board of U. S. Civil Service Examiners, at any first or second-class post office, or from the Commission's Washington Office.

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CHICAGO EXPERTS WORK TO IRON OUT F-M KINKS

The radio industry has gone to work to overcome the obstacles that stand in the way of a full appreciation of its newest wonder, frequency modulation. F-M is Maj. Edwin H. Armstrong's new system of high fidelity, staticless broadcasting, Larry Wolters writer in the Chicago Tribune.

Station W-G-N last Tuesday filed an application for a 50,000-watt F-M transmitter with the federal communications commission.

Before embracing F-M, radio experts suggest that it may be wise for listeners, particularly if middle aged listeners or elderly to have their hearing range tested. F-M transmits the entire range of tones audible to humans from 25 to 15,000 cycles (or waves) per second. Moreover, the FCC has set this 15,000 "ceiling" as standard for F-M stations. They must all transmit the full range.

Only a minority of humans can hear tones this high. (Dogs hear much toned higher. The silent dog whistle, inaudible to humans is pitched at 16,000 cycles.) Large scale tests, conducted by Bell Telephone laboratories, show approximately 10,000 as the upper limit for the minority of humans.

Many middle aged or elderly persons, unaware of aura shortcomings, have found their range not extending much beyond 5,000 after submitting to tests. Such persons cannot hear a piano with complete naturalness. The range of its fundamental tones is from 26 to 4,186 (middle C is 256). But with its harmonic or overtones, which give an instrument its tone quality, or timbre, the piano reaches up to 8,100 cycles.

Many persons who are not aware of any impairment in their auditory equipment cannot hear the chirp of crickets. Their range extends from 3,000 to around 6,000 cycles.

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This came to the attention of E. F. McDonald, Jr., president of Zenith Radio Corporation in Chicago. He had tested all Zenith workmen who must rely on their hearing in their jobs.

A startlingly high proportion, Commander McDonald said, were found to have hearing impairments, particularly deficiencies in their sense of range. Those with "tin" ears were transferred to jobs where good hearing was not a prerequisite. Mr. McDonald recommended similar tests for piano tuners!

F-M broadcasters face a major bottleneck in the limited capacity of network telephone circuits. Mutual's leased circuits, best available, carry only 5,250 cycles.

Phone lines from W-G-N's studios to transmitter can handle 8,000 cycles. Still better facilities will be available for short distances linking F-M transmitters and studios. But suitable long distance lines for F-M are not available. Broadcasters are told by the telephone companies that they cannot be laid without great expense.

So the F-M interests are seriously considering setting up radio relay networks without telephone wires. Stations would be linked together by "beam" transmitters at 50 to 100 mile intervals. Such networks, they say, would provide high fidelity transmission.

Standard receivers tuned out in volume today will carry only from about 3,500 to 5,000 cycles. But manufacturers are prepared to make higher fidelity receivers, with the advent of F-M when the other obstacles to fine reception are cleared up.

At least one manufacturer in Chicago, the E. H. Scott Radio laboratories, has already brought out an F-M receiver which, the company claims, delivers the full range of frequencies up to 15,000 cycles through a dual loudspeaker system. This company has reported that already four out of five customers are buying F-M sets in anticipation of true high fidelity programs.

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AZORES IS SHORT-WAVE LISTENING POST

Reception from the powerful short-wave stations on the Atlantic seaboard of the United States is good, in the Azores according to U. S. Consul George E. Seltzer at St. Michael. The best reception however, is from the short-wave stations in London, Paris, Berlin, and Rome. No difficulty is encountered in reception from the stations in Moscow, Holland, Madrid and in Lisbon. The best reception is obtained on 6, 9, 12, and 22 megacycles. There is no broadcasting station and therefore no use for ultra short-waves.

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FCC CHAIRMAN RETURNS FROM THE WEST

Chairman, James L. Fly, of the Federal Communications Commission returned to Washington after attending the National Broadcasting Association's Convention in San Francisco and inspecting numerous broadcasting stations in the West. Also the Don Lee television station in Los Angeles. Mr. Fly said it was a splendid convention, not only in attendance but in the general attitude of working out problems in the public interest.

Mr. Fly said there had been no increase of program complaints, no sign of hysteria on the part of listeners, because of the war. Asked if the broadcasters were working on a plan to exclude programs sponsored by foreign governments he said this had not been brought to the attention of the Commission. Asked if the FCC was checking up on Fifth Column complaints, Mr. Fly said this work was going on about as usual. Asked if the finger prints of radio operators would be submitted to the Department of Justice, Mr. Fly said there was no reason to do this as the prints were more for identification purposes by the Commission itself.

Mr. Fly said that the matter of a labor advisor to the FCC was under consideration but as yet no one had been named. He expressed satisfaction with the progress being made by the new National Television Committee. Mr. Fly said this committee was representative of the entire industry and that things were moving along very well.

The Chairman, when asked if there was a tendency on the part of stations to seek a boost in power in connection with the National Defense program, said he had heard rumblings of that. No date had been set for the putting in to effect of the North American agreement reallocations but the FCC was working on that problem also. Mr. Fly concluded by saying the Commission had not yet taken up the Monopoly Report and there were no indications as to when it would.

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I. R. E. TO MEET AUG. 28-30

The annual convention of the Institute of Radio Engineers will be held from Aug. 28 to 30 at Los Angeles, Calif. The purpose of the meeting is to provide a forum for the exchange of ideas through presentation of papers prepared by engineers in radio and allied fields.

Among the papers to be offered are:

"Frequency Modulation," Major Edwin H. Armstrong of Columbia University; "A 500-kilowatt High Efficiency Broadcast Transmitter," G. L. Beers, RCA Manufacturing Co., "Television Receiver Characteristics," C. F. Wolcott, Gilfillan Brother, Inc., and "Portable Television Broadcasting," Harry R. Lubcke, Don Lee Broadcasting System.

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NATIONAL RESEARCH COUNCIL RCA FELLOWSHIP ESTABLISHED

A Fellowship for the investigation of biological problems with the electron microscope recently developed in the RCA research laboratories has been established in the National Research Council through funds provided by the RCA Manufacturing Company.

With the RCA electron microscope it is possible to see minute objects that are 20 to 50 times smaller than can be seen with the finest optical microscope.

In considering candidates for what will be known as the RCA Fellowship, the National Research Council will give preference to "versatile young men of United States citizenship, who have sound training in micro-biology, a doctor's degree (Ph.D or M.D.) and a record of original work." The RCA Fellowship is for the year of 1940-41 and will carry a stipendium of \$3000. The work will be carried on at the research laboratory of RCA at Camden, N.J.

"Our purpose in establishing the RCA Fellowship in the National Research Council is two-fold," said G. K. Throckmorton, President of the RCA Manufacturing Company. "One, to help further pioneering research on biological problems that may lead to new conquests in man's continual battle against disease. The other, to develop the best technique for obtaining the fullest benefits of this miraculous new instrument which is now available to research workers in all fields."

With this instrument, it is possible to obtain useful magnification of objects up to 100,000 diameters. Ordinarily, useful magnification of objects under optical microscopes cannot be achieved above 1500 diameters in ordinary light, or above 2500 diameters in ultra-violet light, because resolution, or sharpness of definition, is lost beyond this point.

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NEW SAN FRANCISCO NBC SALES DIVISIONS

In keeping with the recent separation of the sales organization of the National Broadcasting Company, KGO and KPO are making a corresponding division in the San Francisco NBC offices.

Assistant Vice-President Al Nelson, general manager of the NBC Station in San Francisco, has just made this announcement and has designated Gene Grant to head up the Blue Network group and Harry Bucknell to have the corresponding position with relation to the Red Network. Bill Ryan remains general sales manager. This action follows a series of conferences between Nelson, President Niles Trammel, Vice-President Ed Kobak and other executives of NBC who were on the coast for the recent convention of the National Association of Broadcasters. Bucknell was formerly office manager and space buyer for Lord and Thomas in San Francisco. He joined the San Francisco Chronicle as advertising promotion manager in 1934.

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NEW RULES GOVERNING FIXED RADIO SERVICES

The Commission on August 14, 1940, adopted the following new rule governing the fixed radio services, effective September 1, 1940:

"Sec. 6.37 Call letters, transmission of. Every point-to-point telegraph and telephone station in the fixed public and fixed public press services shall transmit three times in succession at half hourly intervals during each 24 hour period the identifying call letters of the frequency or frequencies below 50,000 kilocycles on which transmissions are taking place. This transmission shall be made within the period ten minutes before and ten minutes after the hour and half hour under the following conditions:

Point-to-Point Telegraph Stations

(a) The transmission shall be made in international Morse code utilizing either type A-1 or type A-2 emission at a transmission speed not to exceed twenty-five words per minute without the use of multiplexing, tape facsimile, printer or other similar equipment or methods of operation during such period and shall consist of transmitting the signal "QRA de" followed by the call letters.

(b) Point-to-point telegraph stations engaged in a radiophoto or an Addressed Program transmission shall not be required to transmit identifying call letters during the period when such identification would interrupt the continuity of the program or radiophoto that is being transmitted. In any such case the identifying call letters shall be transmitted, as outlined above, immediately following the conclusion of the program or radiophoto.

Point-to-Point Telephone Stations

(a) The transmission shall be made employing either type A-1, A-2 or A-3 emission; provided, however, when utilizing type A-1 or A-2 emission the transmission shall be made in international Morse code at a transmission speed not to exceed twenty-five words per minute and shall consist of transmitting the signal "QRA de" followed by the call letters. When utilizing type A-3 emission, all privacy or secrecy devices shall be removed from the transmitter input circuit during such period and the announcement shall be made in the following order: "This is station (Call letters)."

(b) Point-to-point telephone stations continuously engaged in a public telephone message, radiophoto, or an Addressed Program transmission shall not be required to transmit identifying call letters during the period when such identification would interrupt the continuity of the message, radiophoto, or program that is being transmitted. In any such case the identifying call letters shall be transmitted, as outlined above, immediately following the conclusion of the message, radiophoto, or program."

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::: TRADE NOTES :::

Construction permit has been issued for a new station to the Star Printing Company of Miles City, Montana, on 1310 kilocycles with 250 watts power unlimited time

Station WTAD at Quincy, Ill has been authorized to operate on 900 kilocycles with 1 kilowatt power using directional antenna at night.

There will be no meeting of the Federal Communications Commission this week due to several vacation absences.

The Bureau of Foreign and Domestic Commerce in its series "World Radio Markets" had just issued a report on Iceland by U. S. Consul R. Borden Reams at Copenhagen.

Also as a part of the "World Radio" series the Bureau has issued a copy of new radio regulations in Chile (new provisions added to Article 84 and 108 of the Chilean regulations governing radio communication in that country.)

H. M. Beville, Jr., director of research for the National Broadcasting Company, New York, spoke at a special luncheon meeting of the American Marketing Association on "Market Research in Radio" in San Francisco. Beville made special explanation of the nationwide postcard survey, about to be released.

Daylight Saving Time, also known as Summer Time, ends in many parts of the United States on Sunday, September 29. On that date, 3:00 a.m., Eastern Daylight Saving Time will automatically become 2:00a.m., Eastern Standard Time.
