# HEINL RADIO BUSINESS LETTER

INSURANCE BUILDING

WASHINGTON, D. C.

ISSUED TWICE A WEEK AND CONTAINING THE LATEST INFORMATION REGARDING THE RULINGS OF THE FEDERAL RADIO COMMISSION, RADIO LEGISLATION, DEPARTMENT OF COMMERCE REGULATIONS, CHANGES IN WAVELENGTH, CALL LETTERS AND POWER, PATENTS, EXPORTS, FEDERAL TRADE COMMISSION RULINGS AND OTHER MATTERS OF INTEREST TO BROADCASTERS AND MANUFACTURERS. :: :: CONFIDENTIAL—NOT FOR PUBLICATION. :: ::

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No. 547

#### RADIO SALES SURVEY AVAILABLE

Room for appreciable improvement in efficiency and costs in the wholesaling of radios, whose importance is shown by the fact that it is the outlet for more than 80 per cent of the products of radio manufacturers, has been disclosed in a census of distribution study made available by the Department of Commerce.

Costs of wholesaling in the radio trade, for all types of wholesale houses, amounted to 15.41 cents for each dollar of net sales, it was shown. This figure is held to be a rough guide to efficiency in carrying on the wholesale radio trade; but the fact that more than one-third of the wholesale merchants operated on an expense margin of less than 15 per cent indicates considerably leeway for betterment among the remaining two-thirds, it was pointed out. At least a careful scrutiny of operating costs would seem to be in order.

The great differences in operating efficiency which obtain in a fairly homogeneous group of business establishments is shown by the fact that operating costs of nine wholesale radio dealers, having an average sales per establishment of \$95,677, were in excess of 55 per cent of net sales, while 14 merchants with average sales of \$242,470 reported percentages of 2.5 to 4.99. Expenses of 618 Other establishments were in between these extremes. Nearly 90 per cent of 641 establishments had costs between 5 and 32.5 per cent.

There are probably numerous factors explaining the wide ranges of costs, among which may be mentioned individual peculiarities and sectional differences.

It is considered noteworthy that the comparatively new radio industry should show such a decided preference for the wholesale distributor. This is all the more amazing when it is recalled that commodities of fairly high unit values, such as radio sets, have been pointed to as lending themselves peculiarly to direct-selling methods. In explanation, it may be said that the very newness of the industry, involving as it does intricate technological problems, has made it necessary to concentrate both capital and initiative on experimentation and production.

The wholesalers have offered a service in distribution which the producers have welcomed. By accepting exclusive agencies, which has made possible the establishment of more definite sales quotas by the manufacturers, wholesalers have, in some cases, contributed to smoother production schedules. Furthermore, they have given intimate attention to the retail field by such activities as supplying service men in each territory.

The wholesalers also have simplified the manufacturer's financing problems by prompt payment of invoices, where direct selling by the manufacturer to the retailer would involve liberal credit terms and tie up capital which might be devoted to production.

The electrical trade is the most important outlet for radios, parts and accessories. Of a total reported sales of these companies, 88.6 per cent went through wholesale establishments of all types in the electrical trade. Wholesale merchants, who accounted for 64 per cent of the radio business in all trades, handled 62.3 per cent of such business in the electrical trade.

The automotive trade was next in importance as an outlet, and wholesale merchants in the hardware and metals trade were third in rank. These three outlets accounted for 96.1 per cent of total sales of radios and equipment, which amounted to about \$600,000,000 in 1929.

A basis for comparison of relative saturation of the radio market is set up by the Census Bureau in supplying information by States on the location of wholesale radio specialty houses along with the percentage of families in the States having radios and the total per capita sales at retail in 1929.

These facts make possible the establishment of market quotas on a more satisfactory basis than has hitherto been available. It is a significant market fact that there is a fairly high degree of correlation apparent between the percentages of families having radio sets and per capita sales at retail.

The wholesaling of radio sets and equipment is highly concentrated. New York, Illinois, Pennsylvania, California, Ohio and New Jersey account for nearly 70 per cent of the total volume. New York City is the leading wholesale market with nearly a third of the total volume of the entire country, and is particularly important, since many New York City establishments have built up national distribution. Chicago is second in importance, followed by Newark and San Francisco. These four cities handle half the total wholesale radio business in the United States.

For wholesale merchants operating costs tend to decline as the size of the business increases, the large-scale establishments showing the lowest costs. Manufacturers' sales branches, however, showed lowest costs in the medium-sized businesses and not for the large-scale concerns. In all instances, the small firms showed the highest cost of doing business.

Several interesting correlations have been developed that should prove to be of material benefit to those who wish to improve their methods of distribution radios.

Decided advantages, for example, are shown for wholesale merchants covering a sales territory under a 75-mile radius, for with but one exception operating expenses were higher for firms operating over a wider area. The exception may be explained by the fact that the 70 establishments covering a radius of 251 to 500 miles showed the largest average sales per establishment of the entire group.

It would seem that the wholesalers and the manufacturers' wholesale branches have considerable to learn from each other. Insofar as they perform the same functions and are comparable, it is concluded that wholesalers should be able to reduce their selling costs and that manufacturers should be able to cut the costs not so directly connected with selling.

A census bulletin on the wholesale distribution of radio sets, parts and accessories may be obtained for 10 cents from the Superintendent of Documents, Washington, D. C.

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#### EXPERIMENTAL STATION ON TELEVISION ASKED

An application for a new experimental visual broadcasting station which would make tests in transmitting television images in color, was recommended for granting in an Examiner's report made public last week by the Federal Radio Commission.

The applicant, the Sparks-Withington Company, Jackson, Mich., proposes to carry on a series of experiments between a television station and an experimental station which will broadcast sound signals simultaneously with the visual images. It was brought out at the hearings on the case June 8th that engineers of the company have developed a method of scanning by which images are transmitted by wire using only half the usual frequency band width required for visual broadcasts. Leland S. Bisbee and James O'Donnell Moran appeared on behalf of Sparks-Withington.

In the report, submitted by Examiner Elmer W. Pratt, it is pointed out that the station, if erected, will be a laboratory for experiments which probably would "result in a substantial contribution to the development of the visual broadcasting art." Chief among these experiments is one in which it is proposed to transmit visual images in color, by a method using a prism filter.

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# I. T. & T. STOCKHOLDERS NUMBER OVER 100,000

The International Telephone & Telegraph Corp. has now joined that small and select group of great American industrial organizations which number more than 100,000 stockholders. This mark, which the Corporation has been approaching for some little time, has now been attained, the figures as of July 16th showing that there are 100,745 individual shareholders.

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## SATURATION OF BATTERY SETS FAR OFF

The general impression is that these days most of the radio receivers are operated from the electric light socket and that the battery operated set is pretty much a thing of the past. A survey just completed by E. E. Horine, of the National Carbon Company, in New York, proves the contrary to be true.

Out of a total of nearly 30,000,000 families, something more than 9,800,000, or roughly one-third, live in homes without electricity, and therefore must use battery operated receivers or do without radio.

Some of the homes without electricity by States follow:

California, 45,221 (estimated); Connecticut, 13,217; Dist. of Columbia, 21,860; Illinois, 333,666; Indiana, 254,762; Towa, 238,774; Kentucky, 368,747; Maine, 44,367; Massachusetts, 59,382; Michigan, 250,175; Minnesota, 234,728; Missouri, 389,918; New Hampshire, 21,845; New Jersey, 71,427; New York, 162,334; Thio, 390,143; Pennsylvania, 506,336; Rhode Island, 3,022; Vermont, 23,975.

The number of families in and around trading areas of certain cities which must depend upon battery sets are as follows:

Hartford, Conn., 2,318; Washington, D. C., 21,860; Chicago, Ill., 76,068; Evansville, Ind., 107,521; Fort Wayne, Ind., 29,449; Indianapolis, Ind.; 106,204; South Bend, Ind., 25,240; Terre Haute, Ind., 40,611; Portland, Maine, 66,857; Boston, Mass., 31,763; Springfield, Mass., 5812; Worcester, Mass., 14,489; Detroit, Mich., 96,051; Grand Rapids, Mich., 54,572; Kansas City, Mo., 137,159; St. Louis, Mo., 251,155; Springfield, Mo., 56,875; Manchester, Keene, N. H., 27,055; Albany, N. Y., 57,082; Buffalo, N. Y., 56,837; New York City, 208,414; Rochester, N. Y., 41,681; Syracuse, N. Y., 28400; Cincinnati, O., 132,531; Cleveland, O., 82,720; Columbus, O., 124,088; Toledo, 55,963; Pittsburgh, Pa., 156,448; Philadelphia, Pa., 161,504; Providence, R. I., 9,554.

"This enormous and practically untouched radio market has seen radio programs and receivers both get better and better, year by year, but has been unable to take advantage of either", Mr. Horine says, commenting upon the report; "it wants radio, and for the most part it needs radio; and now that a really practical and satisfactory battery receiver has been developed, one which is as modern in every respect as the latest all-electric set, it presents the biggest opportunity the Radio Industry has had for a long time."

"Rural radio possibilities are probably greater both from a commercial and a social point of view than those in our cities. This is proven by the fact that nearly a third of all the homes in the United States are without electricity and must use the battery-type radio set or do altogether without radio. The

importance of this is emphasized by the new report on the market for air cell radio receivers just prepared by Mr. Horine, R. S. McBride, consulting engineer in Washington, said.

"The report shows that in some trading areas there are many more homes without electricity than those which are wired. In such areas the air cell receiver, which is now made by most of the prominent radio set manufacturers, is the only answer to good radio service. Such householders have no lamp socket in which to connect a socket set nor have they power even to recharge a storage battery. The inconvenience of taking such battery to town every time it needs recharging makes the air cell set vastly more convenient, in fact more economical as well.

"The market which can be reached by this new type of radio equipment is one which really needs radio the most of all. It lies largely in rural areas where other means for distribution of news and for securing entertainment are most limited. Great social benefit, as well as commercial opportunity, will therefore come from a full development of these possibilities by the radio set manufacturers."

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# RECORDS RADIO PERFORMANCE ACROSS EQUATOR

A celebration in Buenos Aires participated in by the President of Argentina and Robert Woods Bliss, American Ambassador, and transmitted via short waves, was heard so clearly in Washington recently that L. W. Windmuller, in the National Press Building, succeeded in recording the ceremonies on an aluminum disk. It is believed to be the first short-wave program from across the Equator ever successfully recorded.

Although some static was picked up, the 7000-mile broad-cast is strikingly clear on the record. There is a rendition by the National Band of the Argentinian hymn, "Oid mortales, el grito, sagrado". The final recorded words are those of the announcer at Station LR4, in Buenos Aires.

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#### OBJECTS TO PRICE MENTION

"Now during certain hours advertisers may mention prices in radio broadcasting", the <u>Editor and Publisher</u> comments, "but we well remember the day when the broadcasters promised the public that only names of sponsors would be permitted."

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### NEW FREQUENCY REGULATION IMPROVES RECEPTION

One month after its strict frequency-maintenance regulation went into effect, the Federal Radio Commission has determined that stations are reaching the largest audience in the history of broadcasting.

The maintenance order, which requires that broadcasting stations keep within a frequency 50 cycles above or below their assigned channels, and which became effective June 22nd, has resulted in universal reduction of interference and increase of service area for nearly all stations, it was explained.

William D. Terrell, Chief of the Commission's new Division of Field Operations, reports that stations throughout the country have cooperated in maintaining their assigned channels, and that very few stations have failed to comply with the new regulation.

Engineers of the Commission, after preliminary tests of the effectiveness of the new ruling, have determined that the service area of most stations has been substantially increased, and that objectionable interference has been reduced to a point where it hinders good reception less than ever before.

Summer months, during which hot weather somewhat restricts broadcasting efficiency, are constantly becoming less feared by broadcasters. During the period from June 22 to July 22, hot weather influenced broadcasting less than during the corresponding period of any preceding year, because of the new order. While stations now may not be reaching quite so many persons as last Winter, considering weather conditions, they are reaching proportionately more listeners than during the cold season of any previous year.

Especially has the new ruling aided small local outlets. Stations of low power found that since all adjacent broadcasters are maintaining their frequencies, programs are being received without interference nearly twice as far in all directions from the transmitter as they were this time last year. The Commission has made definite tests on Station WOL, Washington, D. C., operating with 100 watts - and has found that where before the order went into effect, the station could reach only about four miles without interference, it now serves listeners without interference at a distance of nearly 10 miles from the transmitter.

Thus, for many stations, the service area has been doubled. The greatest reduction in interference has come about by almost complete elimination of heterodyne whistles, which made reception bad for nearly all low-power stations.

Advertisers, paying the same rates to stations that they did when a 500-cycle deviation was allowed, are getting more for their money now than before, and are more assured that their messages reach listeners clearly and without distortion.

The order, termed by the Commission "a recognition of the greatest technical advancement in the broadcast transmitter art in recent years", is not something that can become effective overnight. The change has been gradual from the old to the new deviation requirements. Some stations have not yet been able to install frequency-control devices, because the Bureau of Standards, which must test all apparatus, has been swamped with work because of the order. When the apparatus is working in all stations, it is believed an even greater improvement will be noted.

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## RMA REORGANIZATION PLAN TO BE CONSIDERED AT CLEVELAND

A united radio manufacturing industry, with greater cooperation and active direction of receiving set makers; aggressive and constructive measures on behalf of all radio interests, and development of special interests of various groups among radio manufacturers are objects of a plan to reorganize the RMA.

The reorganization plan was approved unanimously by the RMA Board of Directors at Cleveland, July 19th. A membership meeting to consider the plan will be held at 10:00 A.M. Tuesday, August 23rd, at Cleveland, Ohio.

Important features, incorporated in the proposed new bylaws of the RMA, provide for much larger influence and action by chief executives of set manufacturers in industry and RMA affairs, together with unified action and closer work between various manufacturing groups, such as set, tube, parts and accessory manufacturers. Special interests of such groups will be promoted under the direction of each group but with unity and cooperative action on all general industry interests.

The RMA Board of Directors at their Cleveland meeting also ordered a one-third reduction in Association dues of all members for the coming fiscal year of the Association. In view of the one-third reduction in dues, effective August 1st, and additional dues reductions of members because of their decreased volume of sales during the past year, the existing sliding scale of dues rates was unchanged.

Another financial action to benefit members was a ten per cent refund ordered by the Board of Directors to all exhibiting companies in the Trade Show at Chicago last May. The ten per cent rebate was a voluntary action of the Board, not required under contracts with exhibitors, but was made possible by rinancial results including operating economies. For these the Directors recognized the service of Bond Geddes, Trade Show Manager, with a rising vote of appreciation.

#### BUYING HESITANCY REACHED LOW SAYS KLUGH

Buying hesitancy has, in the opinion of Paul B. Klugh, Vice-President of the Zenith Radio Corporation, reached its low ebb and from now on we should all see an increase in radio sales.

"Too many sets have seen the end of their usefulness, and the public will not do without radio", Mr. Klugh declared in announcing the Zenith line for 1932-3.

"There are over five million electric midget sets in the homes of American people today. Easily one-half, or two and a half million, of these owners want standard electric sets. Of the four million battery operated sets, one-fourth, or one million, are being used in homes with electric current and, therefore, can be sold standard electric sets. There are approximately five million obsolete electric sets and another six million wired homes without any radio, all of whom can be sold new radio receivers — a total market today for fourteen million receivers. This is a tremendous market.

"A country-wide survey made of dealers' stocks shows the smallest inventory of radio sets since radio became a real business. These dealers must have up-to-date, standard, well-known radios. Their demands will be felt at an early date.

"A few years back, Zenith built and sold radios for which the customers paid as high as \$2,500. Contrast those days with the new prices of our new line - from \$49.95 to \$184 tax paid - and they are better radio sets than we have ever built. So definitely are they better that we invite anyone to name a single demonstrable improvement known in radio which is not found in the Zenith 1932 line, and we further challenge anyone to name a radio line which contains all the improvements found in our Zenith 1932 models.

"I could not conceive three years ago by any stretch of the imagination that Zenith would ever build a quality radio set and sell it in a console at about \$60 - nor an automatically tuned radio set with the exclusive 'Press the button, there's your station!' feature selling around \$100. Nor could I, nor any of my associates, foresee that the standard system of discounts to jobbers, which we ourselves inaugurated many years ago, would ever be lengthened as we have lengthened them today.

"Of course, trading up in itself is not the only solution. The past three years have played havor with a number of manufacturers. Distributors and dealers have taken on radio lines only to find, a few months later, that the manufacturer has gone out of business, liquidated, or dropped radio from his manufacturing program. This has caused tremendous losses on inventory. I say, therefore, that more distributors and dealers today are looking for permanency and stabilization than ever before — and that is one important contribution to a return of radio profits. Radio manufacturing is fast being shorn of a racketeering atmosphere. The

Get-Rich-Quick Wallingfords are going. There are few of us left in a strong financial position, and to our knowledge only one of us left who manufactures radio exclusively, namely, Zenith.

"Yes, we are optimistic - not only from the standpoint of greater industry sales, but we also feel that the radio dealer and jobber will make money if they will bring themselves to understand that radio is today a stable industry and the romance and thrill of 'wireless' unsubdued as yet by Father Time."

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## APPLICATIONS RECEIVED BY FEDERAL RADIO COMMISSION

July 21 - WCGU, United States Broadcasting Corp., Brooklyn, N. Y., C.P. to move transmitter from Brooklyn, N. Y. to Long Island City, N. Y.; WLEY, Lexington Air Station, Lexington, Mass., C.P. to move station from Lexington to Lowell, Mass.; WELL, Enquirer-News Co., Battle Creek, Mich., C.P. to make changes in equipment and move studio locally; KWEA, Hello World Broadcasting Corp., Shreveport, La., C.P. to install new transmitter; KMBC, Midland Broadcasting Co., Kansas City, Mo., license to cover C.P. granted June 7, 1932, for new transmitter; WLS, Agricultural Broadcasting Co., Chicago, Ill., modification of license for authority to use auxiliary of WENR-WBCN for auxiliary purposes of WLS; KXL, KXL Broadcasters, Portland, Oreg., C.P. for a new transmitter and to change from 1420 kc., 100 w., sharing with KBPS to 1410 kc., 250 w. unlimited time, facilities of KTBR, Portland, Oreg.

# Applications Other Than Broadcasting

July 20 - City of Klamath Falls Police Dept., Klamath Falls, Ore., new C.P. for emergency police station, frequency to be assigned, 25 watts; WPEK, City of New Orleans Police Dept., New Orleans, La., license covering C.P. for 2430 kc., 100 watts, emergency police service; Aeronautical Radio, Inc.: KGTH, Salt Lake City, Utah, license covering C.P. for 2720, 2732, 4110, 6510, 6520, 6530, 8015 kc., 150 watts, aero. point-to-point service; KGTJ, Las Vegas, Nev. same as above; W3XAU, Universal Broadcasting Co., Newton Twp., Pa., modification of relay broadcasting C.P. for extension of completion date to 10-13/32; Radio Engineering Lab., Inc.; On Nash auto in New York, and on Essex Auto in New York - new C.P.s for one frequency between 40,000 to 56,000 kc., and one between 60,000 to 90,000 kc., 2 watts, experimental service; Airfan Radio Corp., Ltd., Portable in vicinity of San Diego, Calif., C.P. for 400,000 kc., 6 watts amended to change service from temporary broadcast pickup to general experimental.

July 21 - Police Department, Wichita Falls, Tex., new C.P. for 1712 kc., 50 w., emergency police service; Police Department, Village of Old Field, Inc., Long Island, N. Y., new C.P. for 1712 kc., 15 w., emergency police service; W8XAR, Westinghouse Electric & Manufacturing Co., Saxonburg, Pa., renewal of special experimental

license for 980 kc., 50 to 400 kw., special experimental service; W10XAS, Pacific Telephone & Telegraph Co., portable, renewal of general experimental license for 1594, 2398, 3492.5, 4797.5 kc., 50 w.; R.C.A. Communications, Inc.: W2D, WKL, W2C, W2U, WET, Rocky Point, N. Y., modification of license for change in serial number of transmitter and points of communication.

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## DECISIONS OF THE FEDERAL RADIO COMMISSION

# Applications Granted (July 21, 1932)

WEBR, Howell Broadcasting Co., Inc., Buffalo, N. Y., C.P. to install auxiliary transmitter at present main transmitter location, 100 w. day and night; WMBG, Havens & Martin, Inc., Richmond, Va., C.P. to make changes in auxiliary transmitter and increase maximum rated and operating power from 10 to 100 w.; KRMD, KRMD, Inc., Shreveport, La., C.P. to move transmitter locally in Shreveport; WWL, Loyola University, New Orleans, La., modification of C.P. to extend completion date to Sept. 15, 1932 (original permitauthorized increase in power from 5 to 10 kw., installation of new equipment change in hours of operation from sharing with KWKH to specified hours, and moving transmitter locally); KFPW, Southwestern Hotel Co., Fort Smith, Ark., license 1210 kc., 100 w., unlimited time, covering installation of new equipment; change in EQUIPMENT frequency from 1340 to 1210 kc., increase in power from 50 to 100 watts and increase in hours of operation from daytime only to unlimited; WREN, Jenny Wren Co., Lawrence, Kans., license 1220 kc., 1 kw., shares with KFKU, original permit authorized moving of transmitter from Lawrence to South of Tonganoxie, Kans.

Also, KFGQ, Boone Biblical College, Boone, Iowa, license covering changes in equipment 1310 kc., 100 w., specified hours; KGY, Inc., Olympia, Wash., license covering move of station from Lacey to Olympia, Wash., installing new equipment, change frequency from 1200 to 1210 kc., increase power from 10 to 100 w., and change in hours of operation from unlimited to specified; WIS, South Carolina Broadcasting Co., Inc., Columbia, S. C., authority for direct measurement of antenna input; WLIT, Lit Bros., Philadelphia, Pa., consent to voluntary assignment of license to Lit Bros. Broadcasting System, Inc.; WEAI, School of Electrical Engineering, Cornel University, Ithaca, N. Y., authority to reduce hours of operation from daytime only to not less than 1 hour per day to and including Oct. 1, 1932; KFPM, The New Furniture Co., Greenville, Tex., special authorization to operate from 9 P.M. to 12 midnight, OST, on July 23, Aug. 27 and Nov. 8, 1932; WCFL, Chicago Federation of Labor, Chicago, Ill., renewal of broadcast station license, also granted special authorization to operate unlimited time experimentally on 970 kc., from Aug. 1, 1932 to Feb. 1, 1933; WCAZ, Superior Broadcasting Service, Inc., Carthage, Ill., renewal of license, 1070 kc., 50 w., hours of operation from 9:30 to 3:30 P.M. CST, daily except Sunday; WOWO, Main Auto Supply Co., Fort Wayne,

Also, Radio Service and Engineering Laboratories, Harrisburg, Pa., C.P. (general experimental) 4797.5, 8655, 12862.5 kc., 100 w., yours of operation 9 to 12 A.M.; 2 to 9 P.M., EST; Airfan Radio Service, Ltd., portable in vicinity of San Diego, Calif., general experimental C.P. frequencies 60000 to 400000 kc.; Mobile Broadcasting Corp., Dauphin Island, Ala., C.P. for temporary broadcast pickup service 2342 kc., 15 w., Aug. 8 to 10 inclusive; Atlantic Broadcasting Corp., New York, experimental visual broadcasting license, frequencies 43000-46000, 48500-50300, 60000-80000 kc., 50 w.; W2XAQ, R. C. Powell & Co., Inc., New York, general experimental license, 51400, 60000 kc., 50 w.; The Producers Steamship Co. on vessel "Louis W. Hill", special experimental license, 484 kc., 1 w.

Also, W9XL, American Radio News Corp., Tinley Park, Ill., special experimental license, 7625, 7640, 9230, 9390, 10090 kc., 500 w.; WPES, City of Saginaw, Saginaw, Mich., police service license 2442 kc., 50 w.; WLD, Pere Marquette Radio Corp., Ludington Mich., license, fixed public point-to-point telegraph service, 169 kc., 200 w.; KHL, Mutual Telephone Co., Wailuku, T. H., KRM, Lihue, T.H., licenses, fixed public point-to-point telegraph 3195, 3225 kc., unlimited, 5720, 5750 kc., day only, 500 w.; KGTN, Aeronaucal Radio, Inc., Las Vegas, Nev., license for aviation service, 2900, 3072.5, 3082.5, 3088, 5519\* 5540\* 5672.5, 5692.5 kc. \*available to March 1, 1933 only), 5 w.; Frank Coombs Dixon, Cuyahoga Falls, Ohio, amateur station license; National Broadcasting Co., WIEW, WIEX, New York, authority to operate portable broadcast pickup transmitter WIEW on frequency 1566 kc., and 2390 kc., July 21 to 28 inclusive, in connection with preliminary tests and rebroadcast description Sky Line of New York from deck of excursion steamer "Mendalay" around Manhattan Island. On July 22nd and 23 same transmitter to operate on SS. "Manhattan" while passing Atlantic City; also to use WIEX on same frequencies at Shelburne Hotel in Atlantic City.

# Applications Denied

The following applications, heretofore designated for hearing were denied because applicants failed to enter their appearances within time allowed: Claude Raymond Brand, Deadwood, S. Dak., C.P. 1200 kc., 100 w., three hours daily; Harvard University School of Geography, Cambridge, Mass., C.P. 17143, 16375, 15050, 9000, 5900 kc., day, 9000, 8200, 6700, 5900 kc., night, 350 w., unlimited time.

Application Dismissed: Tri County Broadcasting Co., Los Gatos, Calif., C.P. 1420 kc., 100 w., half-time (this application was dismissed at request of applicant).