

# HEINL RADIO BUSINESS LETTER

2400 CALIFORNIA STREET

WASHINGTON, D. C.

**CONFIDENTIAL — Not for Publication**

ALA  
g-  
fall

INDEX TO ISSUE OF NOVEMBER 17, 1936.

BBC Explains Why It Uses Two Television Systems.....	2
Mackay Scores Point As FCC Grants Oral Argument.....	4
40 Speakers Listed For Educational Conference.....	5
U. S. Delegation To Warsaw Parley Returns.....	6
FCC Grants Temporary Exemption On Radio Watch At Sea.....	7
Quaker State Net Forms With 16 Stations.....	7
Cuba Promises Increased Radio Sales.....	8
N. Y. Educator Cites Danger Of School Radios.....	8
Prall Speaks At Flamm Testimonial Dinner.....	9
Publishers' Organ Pays Unusual Tribute To Philco.....	10
Television Promoters Cited By N. Y. C. Court.....	11
Mutual Billings Increase 50 Percent In October.....	12

No. 981

F g L m  
g A d J

November 17, 1936

## BBC EXPLAINS WHY IT USES TWO TELEVISION SYSTEMS

Admitting that television is still in an experimental stage, Sir Noel Ashbridge, Controller of Engineering for the British Broadcasting Corporation, explained this week why BBC is using two different systems of transmission in its regular television service launched this month in London.

Writing in the current issue of World-Radio, BBC Journal, Sir Noel said:

"On Monday, November 2, at 3 o'clock, the new London Television Station at Alexandra Palace began transmitting regular programs for the first time. It cannot be said, however, that television was seen for the first time by the public on this occasion, because during Radiolympia, in August, demonstrations from the Alexandra Palace were seen by some 100,000 visitors to the exhibition. Since October 1, the station has been transmitting on an experimental basis mainly for the benefit of the trade, but November 2 marked by far the most important step in the development of the interesting extension of our service, and the programs will be planned for reception by the public as part of the BBC service, and not merely as demonstrations or experiments.

"Readers of World-Radio, particularly those with technical inclinations, may be inclined to ask why in this case we are using two different systems; and it may be of interest, therefore, to explain the conditions under which the service is operated.

"If we compare television with ordinary broadcasting, we find there are a number of technical differences, but the most important is that in the case of television, the design of the receiver is inevitably bound up with the system of transmission in use. Thus, if an engineer is setting out to design a system for transmitting television, he begins by selecting what he considers to be the right number of lines and the right number of pictures per second, and the best method of synchronizing the receiver with the transmitter. Of course, these three factors might be kept fixed while other variations were made which would not affect the receiver, but so far as most existing systems are concerned, the design of the receiver is determined by these transmitting conditions. Now, when we come to consider ordinary broadcasting, this is not the case. There are, perhaps, two dozen different makes of transmitter working on the continent of Europe, and yet - except for considerations of the finer degrees of quality of reproduction - there is no means of knowing which system is in use when listening on any make of receiver.

"Everyone is saying that television is in its infancy, and, although the results are far better than most people expect, this statement is essentially true, and true to the extent that it is difficult for anyone at the moment to say what is the right number of lines and pictures to use and the best method of synchronization. This was one of the difficulties which faced the original Television Committee under Lord Selsdon, appointed by the Postmaster-General in May, 1934. Eventually, it was recommended that a television station should be set up in London to establish a service, but at the same time try out what they considered to be the two best systems available. These two systems use different transmitting conditions, and, although ultimately there must be standardization, this obviously should not be attempted until sufficient knowledge has been obtained to permit of a decision being reasonably permanent.

"Thus it came about that the two systems installed at the Alexandra Palace - that is, those developed by Messrs. Baird Television, Limited, and Messrs. Marconi-E.M.I. Television Co., Ltd., respectively - are to be used during alternate weeks. As already mentioned, the number of lines, the number of pictures, and the synchronizing pulses are not the same in each case. Receivers, therefore, must provide for this, and a switch will be found, usually marked either with the two systems by name or with the number of lines used in each case, which is 240, 25 pictures per second, for the Baird system, and 405, 25 pictures per second interlaced (50 frames per second), for the Marconi-E.M.I. system.

"So much for the question of system, number of lines, and pictures, etc., but there are other important differences which make the performance of the new station less easy to predict than in the case of an ordinary broadcasting station. The great width of the side-bands, or modulation frequencies which is essential for high-definition television, makes it impossible to use ordinary broadcasting wavelengths, and we are forced down to what are called the ultra-short wavelengths. In this case the wavelength used for vision is 45 megacycles per second (6.66 metres) and for sound 41.5 megacycles per second (7.24 metres).

"Most readers of this paper will know that, while great strides have been made in the technique of transmission on these very short wavelengths during the past year or two, there is always some doubt as to the range to be expected. This is not because no measurements have been taken, but rather because reception depends very much on local conditions. We know already that in some directions strength of reception does not die away regularly as the distance is increased. In fact, some places on high ground will have a stronger signal than others which are actually nearer the station but on lower ground. Screening from buildings containing a lot of metal is probable, while in all cases much better reception will be obtained from an aerial erected on a roof as compared with one erected nearer to the



ground. This, of course, is true in the case of the ordinary wavelengths, but it will be found much more exaggerated on television wavelengths.

"Naturally, we are anxiously awaiting the results of the first few weeks of transmission. We want very much to know exactly how viewers fare with regard to strength of reception and interference. We know that there must be some interference from motor-cars, but we don't know how much. We know that there will be pockets or areas of bad reception, but we don't know exactly where they will be, although we have some idea. We are not so much interested in freak ranges, and it would be less interesting to know that the London Television Station can be received on the top of Snowdon than, for example, that it can be received over large areas thirty miles from the station. What we want to find out most is the area covered for good day-to-day reliable reception. We may have to wait some time for this, naturally, because at first there cannot be a large number of receivers in use, but we shall welcome reports from any viewer so soon as he is in a position to let us know his experiences, after a few weeks' observations.

"The transmission of broadcast television is a new enterprise for the BBC, full of interest and possibilities, but also full of difficulties. At first there will be imperfections, particularly when we try to do a little more than our apparatus can manage, but, if television continues to improve at the same rate as during the past year or two, imperfections and limitations of the more serious kind should rapidly disappear."

X X X X X X X X X X

#### MACKAY SCORES POINT AS FCC GRANTS ORAL ARGUMENT

The Mackay Radio & Telegraph Company, which has been fighting a losing battle before the Federal Communications Commission to get a share of the foreign radio communications business now dominated by the Radio Corporation of America, last week won a skirmish as the FCC agreed to hear oral argument in a re-hearing on December 7th.

The application before the Commission is a request from Mackay to establish a circuit with Oslo, Norway, but a much more important matter of policy is involved as Mackay plans to invade other foreign fields where RCA now operates alone, if it gets the Oslo authorization.

The FCC several months ago rejected the Mackay application on the ground that the area is adequately served by RCA.

Commissioners Irvin Stewart, Chairman of the Telegraph Division, and Eugene O. Sykes, Chairman of the Broadcast Division, dissented from the order granting a rehearing.

X X X X X X X X



## 40 SPEAKERS LISTED FOR EDUCATIONAL CONFERENCE

Forty speakers of national prominence will appear on the program of the First National Conference on Educational Broadcasting, to be held at the Mayflower Hotel in Washington, D. C., on December 10, 11 and 12. The conference will be held in cooperation with the Federal Communications Commission and the United States Office of Education.

Seven general sessions will be held during the three days. Among those who will address these meetings are: Anning S. Prall, Chairman, Federal Communications Commission; Harold L. Ickes, Secretary of the Interior; John W. Studebaker, United States Commissioner of Education; Hendrik Willem Van Loon, author and journalist; Arthur N. Holcombe, Harvard University; Howard W. Odum, University of North Carolina; William Mather Lewis, President, Lafayette College; and David Sarnoff, President, Radio Corporation of America.

A series of twenty discussion groups are scheduled for Thursday afternoon and Friday. The topics for these section meetings are: The Broadcasting Station as a Community Enterprise, Educational Broadcasting in Other Countries, Radio in the Life of the Child, the Radio Workshop, Classroom Broadcasting, Psychological Problems in Radio, Listening Groups, Polling and Measuring the Audience, Influence of Radio on Speech, State Planning for Radio, Talks Programs, Labor's Experience in Radio, The Effect of Broadcasting upon Rural Life, The Forum on the Air, Library and Museum Use of Radio, Music in Broadcasting, Religious Broadcasting, Research Problems in Radio Education, The University Broadcasting Station, and Radio and Propaganda.

Included in the list of sectional conference leaders are: Kirtley F. Mather, Harvard University; Levering Tyson, Director, National Advisory Council on Radio in Education; Mrs. B. F. Langworthy, President, National Congress of Parents and Teachers; William Boutwell, U. S. Office of Education; George F. Zook, President, American Council on Education; Edward S. Robinson, Yale University; Kathryn McHale, General Director, American Association of University Women; Henry C. Link, Secretary, Psychological Corporation; Cabell Greet, Editor, American Speech; Arthur G. Crane, Chairman, National Committee on Education by Radio; Edward R. Murrow, Director of Talks, Columbia Broadcasting System; Spencer Miller, Jr., Director, Workers Education Bureau of America; Morse Salisbury, Chief of Radio Service, United States Department of Agriculture; George V. Denny, Jr., Director, America's Town Meeting of the Air; Carl H. Milam, Secretary, American Library Association; L. V. Coleman, Director, American Association of Museums; Olga Samaroff, Juilliard Musical Foundation; George Johnson, Secretary General, National Catholic Educational Association; W. W. Charters, Director, Institute for Education by Radio; E. H. Lindley, Chancellor, University of Kansas; and Lyman Bryson, Columbia University.

A Thursday evening session, presented under the auspices of the Institute of Radio Engineers, will deal with the technical aspects of radio. A group of prominent radio engineers will present a discussion of the possibilities and limitations of sound, facsimile, and television broadcasting in the regular, medium high, and ultra high frequency bands as they are allocated by the Federal Communications Commission to these services.

At the formal banquet on Friday evening, the theme of the speeches will be "The Influence of Radio in the Comity of Nations."

Sixty-eight national organizations are sponsoring or cooperating in the conference plans. C. S. Marsh, 744 Jackson Place, Washington, D. C., is serving as Executive Secretary of the Conference.

All sessions of the Conference are open to the public without charge.

X X X X X X X X X

#### U. S. DELEGATION TO WARSAW PARLEY RETURNS

The American Delegation to the Warsaw Conference of the C.C.I. Telegraph, consisting of William J. Norfleet, Chief Accounting Department, Federal Communications Commission, Francis Colt de Wolf, Treaty Division, Department of State, and Gerald C. Gross, Chief, International Section, Federal Communications Commission, returned to Washington this week. Its members expressed general satisfaction with the results of the Conference. They explained that the existing rate structure for all classes of international cable and radio traffic was left unchanged pending further study by the Governments of the world prior to the Conference to be held in Cairo, Egypt, beginning February 1, 1936.

The Conference served a useful purpose in the clarification of the principal viewpoints of the various European and extra-European countries who have heretofore been signatories to the Telegraph Regulations. The proposals made at the Warsaw Conference, and referred to the administrations for further study prior to Cairo, fall into three main groups for extra-European traffic. The first group consists of a unification of code and clear language with a 60% coefficient, the second group consists of the unification of clear and code language with a 66-2/3% coefficient and the third group favors the maintenance of the status quo.

The report of the American delegation is being prepared for early transmission to the Secretary of State and will be available for distribution within a short time.

X X X X X X



11/17/36

## FCC GRANTS TEMPORARY EXEMPTION ON RADIO WATCH AT SEA

The Federal Communications Commission this week granted an exemption from its own regulations, issued in October on the basis of the International Convention for Promoting Safety of Life at Sea.

Cargo ships of over 5,500 gross tons from November 7 until February 6, 1937, will not be required to maintain a continuous watch, as previously ordered, providing that such ships maintain during that period a radio watch by means of a licensed operator at least eight hours a day.

X X X X X X X X

## QUAKER STATE NET FORMS WITH 16 STATIONS

The latest hookup of radio stations, formed this month, is the Quaker State Network, comprising 16 stations covering urban and rural areas of Pennsylvania. Most of the stations in the group have been aligned by wire during the last several months for political broadcasts, and it was decided to perpetuate the venture as a state-wide chain for regular commercial service, effective November 15th.

Cities to be covered by the chain, according to Donald Withycomb, General Manager of WFIL, Philadelphia, the key station, will include Philadelphia, Pittsburgh, Harrisburg, Reading, Scranton, York, Williamsport, Lancaster, Altoona, Erie, Allentown, Easton, Johnstown, Hazleton, Wilkes-Barre and Sunbury; also served will be Cumberland, Md., second largest market in that State.

The network will be available in three groups - WFIL, WCBA, Allentown, WRAW, Reading, WEST, Easton, WGBI, Scranton, WBRE, Wilkes-Barre, WAZI, Hazleton and WGAL, Lancaster, comprising the Eastern Group. WKBO, Harrisburg, WKOK, Sunbury, WRAK, Williamsport, and WORK, York, will comprise the Central Group. WFBG, Altoona, WJAC, Johnstown, WTBO, Cumberland, WWSW, Pittsburgh and WLEU, Erie, will comprise the Western Group. The quarter-hour rate for the entire network before 6 p.m. will be \$535; half-hour \$763 and hour \$1,100. The cost of a quarter-hour after 6 p.m. will be \$829; half-hour \$1,190, and one hour \$1,734.

X X X X X X X X

## CUBA PROMISES INCREASED RADIO SALES

The outlook for increased sales of radio receiving sets in Cuba during the current season appears very favorable, a report to the Commerce Department from its Habana office points out.

Imports of radio receiving sets into Habana in October, according to compilations from ships' manifests, numbered 3,455 units, valued at \$98,903, compared with 2,914 units, valued at \$70,425, in September and 2,452 units, valued at \$65,120 in October, 1935.

More than 33 makes were represented in the October imports, the report states. All of the receiving sets received in Habana during the month were of United States origin.

X X X X X X X X X

## N. Y. EDUCATOR CITES DANGER OF SCHOOL RADIOS

The radio was seen as a potential danger in the public schools by James Marshall, Vice-President of the New York City Board of Education, in opposing the installation of radio equipment in the Bronx Industrial High School last week.

Mr. Marshall cast a negative vote at a meeting of the Board on a contract item for \$1,790 to cover the installation, but his six colleagues voted him down. He explained his opposition in saying that the radio might interfere with freedom of teaching and might be "abused" during political campaigns.

Mr. Marshall read a newspaper dispatch from Germany telling of a baker who faced trial on charges of sedition because he had turned off his radio during an address by Chancellor Hitler, and adds that he did not care to see "the day when a teacher in the school system would be penalized for turning the radio off or on, and I think we are inviting that danger."

X X X X X X X X X X

Denial of an application by the North Jersey Broadcasting Co., Paterson, N. J., for a construction permit to operate on 620 kc., 250 watts, daytime, was recommended to the Federal Communications Commission this week by Examiner John P. Bramhall.

X X X X X X X X X X



11/17/36

## PRALL SPEAKS AT FLAMM TESTIMONIAL DINNER

An appeal to "keep the air clean" was made by Anning S. Prall, Chairman of the Federal Communications Commission, at a dinner in honor of Donald Flamm, owner of WMCA, key station of the Inter-City Broadcasting System, Saturday evening, November 14. The dinner was held at the Hotel Plaza in New York, the proceeds being devoted to the support of the Infants' Home of Brooklyn.

More than a thousand executives of the radio industry and leaders in other vocations were in attendance.

"We of the Federal Communications Commission are trying to do real things in Washington to keep the air clear of objectionable broadcasts", Mr. Prall said. "We feel that what goes into the American home through broadcasts must be clean and it must be wholesome. We feel we are interested in a new and vital industry and we know that unless the broadcaster does his part to keep the air clean, the industry will never develop as we expect it."

Rudy Vallee, orchestra leader, acknowledged his debt to Mr. Flamm, reporting his first series of broadcasts over WMCA, but admitted that he had made one broadcast prior to his debut on the New York station.

Postmaster Albert Goldman paid tribute to Mr. Flamm as "a great executive and a great contributor to human causes."

Grover A. Whalen, Chairman of the New York World Fair of 1939, lauded Mr. Flamm for his work for the Infants' Home.

Other speakers included Max D. Steuer, Justice Ferdinand Pecora, William Weisman, David Sarnoff, who spoke of Mr. Flamm's part in development of the radio industry, Judge Jonah J. Goldstein, Gene Buck and Mr. Flamm.

A talk by Harry Herschfield, humorist and after dinner speaker was brought to the dinner by wire from the West Coast. Mr. Flamm in response to the talks gave one of his well known witty addresses.

A. J. McCosker, head of WOR, was honorary chairman of the dinner and Miss Bert Green, also of WOR, toastmistress.

X X X X X X X X

## PUBLISHERS' ORGAN PAYS UNUSUAL TRIBUTE TO PHILCO

Almost without precedent is the lead-article display given by Editor & Publisher in its November 14 issue to a story of the rise of the Philco Radio & Television Corporation, Philadelphia. The key, however, is that Philco is the largest newspaper advertiser among the radio manufacturers. The beginning of the story, by Robert S. Mann, follows:

"The company that sells the most radio sets today is a company than ten years ago was selling none. Starting at zero in an industry full of ambitious manufacturers and cut-throat competition, Philco Radio & Television Corporation passed the established leaders with giant strides and has come forward to a position where it sells two instruments every time the rest of the industry sells three. Philco's sales of radio sets have passed eight million, and for 1936 alone will probably be more than two million.

"The enlarged and re-enlarged factories that make Philco radios are working day and night to keep up with orders this Fall. The orders come from Philco's retail organization embracing around 18,000 dealers, whose gross sales this year may total considerably more than \$100,000,000 at retail prices.

"And how does Philco pile up such a huge total of business? How has it established itself so firmly in its position of leadership?

"In the first place by having a quality product, sound business policies, and an alert sales organization. But also by an advertising program equally high in quality, equally sound in conception and administration, and equally alert.

"For at least five years, Philco has been the heaviest advertiser in the industry. Currently it is spending well over a million dollars a year in newspapers, and its cooperative distributor and dealer advertising may push that total up another half-million dollars or more. Philco doesn't tell the size of its yearly advertising expenditures, but it did announce recently that \$500,000 would be thrown into one newspaper campaign, additional to other advertising, running until Christmas. Since the beginning of 1929, despite the intervention of the great depression, Philco has spent at least \$6,000,000 in newspapers, it is safe to say.

"In magazines and network broadcasting more accurate figures are available to the advertising world, but not by any announcement of Philco. According to these reports, the magazines and the networks divided about a million dollars a year in 1932 and 1933, the sum rising to nearly 1½ million dollars in 1935. At first the magazines took nine-tenths of the amount,



but of late Philco has gone in heavily for broadcast time, playing Boake Carter, news commentator, as its ace. For the year 1935 Philco was credited with expenditure of \$668,645 in magazines, and \$556,989 with the networks.

"Despite the size of these expenditures, the total newspaper advertising devoted to Philco continues to amount to between three and four times as much as is spent in any other medium."

X X X X X X X X

#### TELEVISION PROMOTERS CITED BY N.Y.C. COURT

The Television Corporation of America, its President, Oliver C. Harriman, and eight other individuals, must appear in the Supreme Court of New York County on November 24th with the corporation's books and records for an examination under the provisions of Article 23a of the General Business Law, according to the New York Times.

The order directing their appearance was signed last Saturday by Supreme Court Justice Joseph M. Callahan. The court issued the order on the application of Attorney General John J. Bennett, Jr. The Attorney General applied for the order as a preliminary step in his investigation of the Maryland corporation, capitalized at 6,000,000 shares of \$1 par value each.

The order names, in addition to the corporation and Mr. Harriman, Jack N. Oppenheim, whose address, 515 Madison Avenue, is the address of the Television Corporation of America; Harry Conley, Treasurer; Ralph A. Clark, William Milne, Fred Knapp, Lewis G. Duell, Hamilton Hoge and William M. Brady.

Ambrose V. McCail, head of the Bureau of Securities of the Attorney General's office, is directing the investigation. Cooperating with him is District Attorney John R. Schwartz of Dutchess County, N. Y., who already has conferred at the Attorney General's office with Mr. McCail.

In an affidavit supporting the Attorney General's application for the order, Mr. McCail stated that Mr. Harriman and Mr. Oppenheim had made an oral agreement to sell their personally owned stock to William Milne, a security dealer, of Albany, N. Y., at the price of 50 cents a share. Mr. McCail's affidavit states that Milne is under permanent injunction restraining him from the sale of securities in the State of New York, but that Milne engaged Knapp and Duell as stock salesmen to resell the stock to the public. In his affidavit Mr. McCail further stated:

"That as also appears from the affidavit of Mr. Schwartz, the stock which was purchased at 50 cents a share is being sold to the public at prices ranging from \$5 to \$10 a share, of which said sum not one penny is paid direct into the treasury of the Television Corporation of America. It is, moreover, indicated that the methods used are not only fraudulent but possibly criminal in their nature."

"The present bank balance of the Television Corporation of America at the Sterling National Bank and Trust Company of New York City", Mr. McCail's affidavit adds, "does not exceed the sum of \$4.58 and, in the opinion of your deponent, the stock now being sold to the public has no true market value."

Mr. Harriman was not reached at either his office or his home, but Mr. Oppenheim, who explained that he had been in communication with him and was authorized to speak for Mr. Harriman and himself, said:

"Mr. Harriman and I had a conference with the Attorney General, also with the District Attorney. It appears that a couple of people not connected with the company have gone haywire, selling stock at prices for which they had no justification. These men were never authorized by the company to sell stock and never sold stock for the company. The company had no knowledge of what they were doing. They merely made a resale of their own stock.

"So far as the proceeding of the Attorney General is concerned, it is simply a routine investigation to determine whether the stock is worth what these fellows were asking for it."

X X X X X X X X

#### MUTUAL BILLINGS INCREASE 50 PERCENT IN OCTOBER

A 50.6 percent increase in time billings is reported for the Mutual Broadcasting System for the month of October, 1936, in comparison with the same month's figures in 1935.

The total billings for October, 1936, were \$271,629.07. For the same month in 1935, they were \$180,374.00. The cumulative figures for the first ten months of 1936 on Mutual total \$1,566,533.09.

X X X X X X X X

James L. Kilpatrick, of the New York Telephone Co., has been named Chairman of the Communications Committee for subscription drive in preparation for the New York World Fair.

X X X X X X X X