NOW LET ME SEE

... there are four fifty-thousand watters covering Greater-New York. But WOR delivers a signal three times stronger than the signal delivered by any station anywhere. This, of course, gives me a greater chance of being heard by more people, more often, at more profit. Hm-mm, there's no choosing about it. WOR's the buy for me. Seems most of the country's biggest timebuyers agree on that.

our address is
1440 Broadway, in New York
The WLS market is big! It includes Chicago—a must market in itself—and the four great agricultural-industrial states of Illinois, Indiana, Wisconsin and Michigan.

WLS covers this entire market... and we honestly believe no other advertising medium does so more effectively. Furthermore, we have the proof to substantiate our belief. Our new coverage map, based on a breakdown of 1,117,956 letters received during 1939, shows exactly where WLS is listened to, county by county—and how intensively it serves that area.

We will gladly send you a copy on request—or ask any John Blair man.
NEW ENGLAND HAS HER OWN 18 LEAGUE BOOTS

They cover the six states in giant strides, leaving clear-cut footprints on the sands of radio time in all of the key localities so completely covered by the 18 stations of The Yankee Network.

There's no magic in this. It's the development of an essential service to provide intensified local coverage of every area where there is the greatest concentration of population and buying power.

And because each of the 18 stations of The Yankee Network combines the two-fold appeal of programs of community interest with blue-ribbon network shows, the local acceptance gives listener-value double-plus on all radio advertising, from cut-ins to live talent presentations. In radio, The Yankee Network IS New England.
"As Winchell might put it,
Lotions of Listeners

saying BOB BEUCUS


Sounds by the surf... On vacation in Florida, Midnighter Winchell caught these cuties cooing... "I heard about this lotion on Winchell's program Sunday," cooed the beautette, "and it's grand!"... "Bett it costs a million for that show," bet the blonde... Her crack is coo-coo—and we're laffing. Because "you don't need a million bucks to do a national sales job."
the Blue gives us...

at Lowest Cost!

V. P. in charge of Advertising, Andrew Jergens Co.

Blue Network helps Jergens attain overwhelming leadership in hand lotion field! Hooper study reveals 40% use of Jergens by Winchell tuner-inners!

Moral: You don’t need a million dollars to do a bang up sales job on the Blue! Here is “Money Market” coverage at lowest national cost!

We had lunch the other day with Bob Orr, v. p. of potent Lennen & Mitchell. He told us a story we know you’ll be interested in hearing. A story about Jergens Lotion—and how the Blue Network has helped it go places! Bob said Jergens ranked third in hand lotion sales before Walter Winchell said “Hello Mr. and Mrs. America” on the Blue. Today Jergens is so far out front “there isn’t any second.”

Last week, along came the results of an amazing survey. It was made by C. E. Hooper who calls it “the strongest sales story for any medium ever compiled.” Of the 2356 people studied six out of ten proved to be Winchell-Blue listeners. And 40% of the regular tuner-inners are Jergens customers! While only 10% of the non-listeners use Jergens.

All of which is very significant, and in the words of Jergens v. p. Beucus, is “confirmed by our sales figures.” It proves the Blue’s ability to produce big sales—at the lowest national cost of any medium!

This low cost, the result of the famous Blue Network Discount Plan, is one reason why the Blue is now being used by America’s smartest advertisers. They also consider it 1940’s best advertising buy because it provides concentrated coverage of America’s “Money Markets,” where 72% of the country’s effective buying power is located.

70% of the Blue’s 1938 advertisers renewed in ’39. 17 new clients joined up. Because they know that sales begin where the Blue begins—at all-time low costs! We’ll be mighty glad to show you how this network can help you “up” your sales for less than $5000* per nighttime half hour, coast to coast! With lotions of love we remain your nationwide sales maker . . . National Broadcasting Company. A Radio Corporation of America Service.

*Network time only, of course
PACIFIC COAST'S BIGGEST
ALL-TIME RADIO CONTRACT
Doubled for 1940-41

ALKA SELTZER, PLACER OF
COAST'S LARGEST RADIO
CONTRACT, BREAKS OWN
RECORD...DOUBLES CON-
TRACT ON DON LEE NETWORK

MUTUAL DON LEE
1076 West 7th Street, Los Angeles, California
Thomas S. Lee, Pres.
Affiliated with Mutual...Represented by Blair
BROADCASTING SYSTEM
THE NATION'S GREATEST REGIONAL NETWORK
SPRING is open season on customers down South. That's when they wake up, stretch themselves, and give everything—including their pocketbooks—a good airing.

They're biting now. But you have to be in the right place to catch them... to cast your advertising bait in the spots that count... where they are receptive. And one of the most receptive markets for radio advertisers in America is Shreveport and its rich tri-state surrounding area... More people live within 150 mile radius of Shreveport than live in the entire state of Louisiana.

**KWKH**

**SHREVEPORT, LOUISIANA**

**50,000 WATTS**

Member South Central Quality Network

WMC—Memphis • KARK—Little Rock
WSMB—New Orleans • KWKH-KTBS—Shreveport

A SHREVEPORT TIMES STATION... in the heart of the world's greatest oil and gas area... Represented by THE BRANHAM CO.
Building keeps booming within the "Golden Horseshoe"...and construction workers here will have fifty million dollars more to spend this year!

Wielders of hammer and saw wield a mighty purchasing power within the "Golden Horseshoe", that prosperous territory blanketed by WJR Detroit and WGAR Cleveland.

Here, workers of the construction industry alone earn nearly a million dollars every week. Here, building soared 38% in 1939, compared to the national increase of 20%.

More than 15% of all the nation's wage earners live and labor inside this concentrated market. And activity of the past three months promises to put another layer on their healthy bankrolls.

Nail down your share of their business. Drive your sales message straight and true. Build sales quickly and economically through the Great Stations of the Great Lakes.

WJR
THE GOODWILL STATION
Detroit
WGAR
THE FRIENDLY STATION
Cleveland

Basic Stations... Columbia Broadcasting System
Edward Petry & Co., Inc.,
National Sales Representatives
ASCP 70% Rate Boost Stirs Industry

Seeks to Split Broadcast Ranks With Preferential Bait; Clearance at Source, 71% Net Levy Are Proposed

CULMINATING a five-year build-up which has had repercussions in Congress, the courts and many State Legislatures, ASCAP on March 21 delivered its newest ultimatum to the broadcasting industry under which it asks about a 70% increase in royalties for the right to perform its music—practically all from the networks.

Stipulating clearance at the source, at 71⁄4% of the gross income of the networks, the proposal, while viewed merely as the "asking price", nevertheless was held to be wholly unacceptable on anything approaching an industry-wide scale. There immediately developed an outbreak of charges and counter-charges which presaged bitter dealings before a solution, if any, is reached. Current contracts expire at the end of this year and ASCAP has notified broadcasters it will be ready to talk terms beginning April 15, hinting broadly that it is ready to accept 10-year contracts to replace the expiring five-year arrangements.

Another 'Munich'

Within the industry, the general reaction was that, despite a sop to smaller stations offered by ASCAP along with readjustments downward to those in the middle brackets, the industry was not disposed to have another "Munich" paralleling the 1922 and 1925 situations. Generally, it was felt that ASCAP had simply changed the words but was using the same music, seeking to split the difference in order to force long-term contracts.

While the ASCAP proposal, delivered orally March 21 to a hand-picked group of broadcasters, caused a sensation, it did not occasion any surprise in broadcasting ranks. A plan of the nature submitted was foreseen. Moreover, the industry generally felt that it was better prepared to meet the ASCAP onslaught than in any previous crisis because of the status of Broadcast Music Inc., as a going organization, designed to introduce competition in the copyrighted music field and to create an industry-owned music reservoir.

HOW RADIO FILLS ASCAP'S COFFERS

FOLLOWING is a tabulation, gleaned from various official and industry sources, indicating the rise in payments by the broadcasting industry to ASCAP from 1925 through 1939, in relation to ASCAP's total income during those years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Gross Income from Radio</th>
<th>ASCAP Income</th>
<th>ASCAP Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1925</td>
<td>$4,520,000</td>
<td>$1,750,000</td>
<td>$1,950,000</td>
</tr>
<tr>
<td>1926</td>
<td>8,170,000</td>
<td>930,000</td>
<td>1,305,000</td>
</tr>
<tr>
<td>1927</td>
<td>12,200,000</td>
<td>1,275,000</td>
<td>2,525,000</td>
</tr>
<tr>
<td>1928</td>
<td>16,800,000</td>
<td>1,950,000</td>
<td>5,850,000</td>
</tr>
<tr>
<td>1929</td>
<td>20,800,000</td>
<td>2,675,000</td>
<td>6,375,000</td>
</tr>
<tr>
<td>1930</td>
<td>27,400,000</td>
<td>3,525,000</td>
<td>7,050,000</td>
</tr>
<tr>
<td>1931</td>
<td>36,300,000</td>
<td>4,475,000</td>
<td>8,975,000</td>
</tr>
<tr>
<td>1932</td>
<td>44,900,000</td>
<td>5,525,000</td>
<td>10,050,000</td>
</tr>
<tr>
<td>1933</td>
<td>51,900,000</td>
<td>6,150,000</td>
<td>11,350,000</td>
</tr>
<tr>
<td>1934</td>
<td>57,800,000</td>
<td>6,875,000</td>
<td>13,750,000</td>
</tr>
<tr>
<td>1935</td>
<td>61,900,000</td>
<td>7,625,000</td>
<td>15,225,000</td>
</tr>
<tr>
<td>1936</td>
<td>67,900,000</td>
<td>8,475,000</td>
<td>17,575,000</td>
</tr>
<tr>
<td>1937</td>
<td>72,800,000</td>
<td>9,325,000</td>
<td>18,625,000</td>
</tr>
<tr>
<td>1938</td>
<td>78,000,000</td>
<td>10,175,000</td>
<td>20,275,000</td>
</tr>
<tr>
<td>1939</td>
<td>82,900,000</td>
<td>11,025,000</td>
<td>22,025,000</td>
</tr>
</tbody>
</table>

Due to the ambiguities in the ASCAP proposal, many stations, particularly those in the intermediate group, found themselves stranded in attempting to calculate ASCAP's demands. As a matter of fact, except for the smaller stations ($50,000 annual gross or less) and the major networks, it was impossible to define precisely what ASCAP seeks in the way of performance royalties.

Based on 1937 industry statistics, as well as on anticipated 1941 income, it was generally concluded that the ASCAP demands are for at least a 70% boost. And in its own statement, ASCAP asserted it sought to place the burden on the networks by requiring clearance at the source at 71⁄4% of their revenue, at the same time relieving affiliated stations of payment on income from the networks.

Seeking a Split

While at first blush, it was thought affiliated stations might view the proposed shifting of this burden favorably, it soon became apparent to the industry that ASCAP's prime effort was to bring about a schism. Moreover, it was almost universally felt among affiliates that any such network fees as ASCAP proposed was not only impossible but could not be absorbed by the networks without some readjustment with affiliates. Based on 1937 figures, it is calculated that, as against $3,975,000 paid into ASCAP coffers under 5% of gross license, plus sustaining fee, the industry would have been called upon under the new ASCAP formula to pay some $8,500,000 on the same income for that year. Projecting the same figures for 1941, and basing them on a $5,000,000 tribute to ASCAP under the present arrangement, it is concluded that the proposed plan would bring to ASCAP something like $8,500,000, which represents about a 70% overall increase.

Miller Spurned

From NAB President Neville Miller and from the executive committee of Independent Radio Network Affiliates came pleas for a united front. While the major networks have refrained from formal comment and have referred all inquiries to BMI, it was readily apparent that they proposed to fight the ASCAP demands down the line. With a membership of some 380 stations, including network-managed and operated stations in BMI, the intention now is to put everything behind the industry-owned music company in an effort to have it supplying stations and networks with performable music in sufficient volume to make capitalization to ASCAP unnecessary when the year ends.

The clearance-at-the-source stipulation in the ASCAP contract caused some consternation, though it had been expected. The industry, at the last half-dozen NAB conventions, has gone on record in favor of both clearance at the source—but along with a "per-program" method of royalty payment—under which ASCAP would be compensated only for such programs as networks or stations use which employed its music. ASCAP, in its notion, the clearance-at-the-source would cause the "per-program" basis with the assertion that after an exhaustive analysis it found it was "uneco-

懦约 to the "we'll deal with the same". But on behalf of the industry it was pointed out that ASCAP had held no conversations at all with the National Broadcasting Committee of the NAB in this connection. As a matter of fact, it had in effect refused to deal with NAB President Miller on a new contract arrangement.

Observers saw in the ASCAP tactics reenactment of what transpired in previous years. The refusal to deal with the NAB, plus an incident which developed at the ASCAP-industry session, when Ed-

ward Klauber, executive vice-president of CBS, walked out, indicated that stormy days are ahead in ASCAP-industry dealings.

ASCP's Proposition

ASCP's proposition, in brief, was that some 300 stations, with gross business in the neighborhood of $50,000 or less, pay only 3% on their net income after agency and certain other industry-wide deductions, along with a sustaining fee of only $4 per month. This, based on rough estimates calculated on 1937 industry figures, might result in a saving of about $180,000 for those stations.

For the second "intermediate" group, which ASCAP described as independents and otherwise, it was given to the negating them for the first time. It was thought, however, that this group probably would include stations doing gross business of $100,000 to $200,000 per year, utilizing the brackets employed by the FCC in its breakdown of 1937 business, which appeared to be the statistical basis for ASCAP's computations. If that is the case, some 227 stations might be affected. Us-

BROADCASTING • Broadcast Advertising

April 1, 1940 • Page 9
But Caesar Decrees Industry Motives

G. Paine, there were present seven representatives of ASCAP and 12 from the broadcast industry. ASCAP President Miller was not invited. After Mr. Paine had read the ASCAP proposition, Mr. Klauber, as reported, asserted that the NAB would take care of CBS' music affairs and then simply walked out.

Paine Writes to Paley

On the same day Mr. Paine wrote CBS President Paley, accusing Mr. Klauber of discourteous conduct and charging that in the future CBS should be represented by some person other than the executive vice-president. In his letter, Mr. Paine said that after the meeting got under way, he read the prepared statement giving the details of the plan and then invited discussion.

"Without any further a do," wrote the ASCAP official, "Mr. Klauber arose and after delivering himself a few mumbled remarks, distinctly and uncleanly, peremptorily left the room. The committee feels that this man's conduct was unmanly, a gentleman and completely discourteous and certainly an abuse of the invitation extended to your company. We are certainly reluctant to believe that this discourtesy reflects in any degree the spirit of your company."

Mr. Paine concluded that he should "personally respectful" if CBS will be represented "by some person other than Klauber in any event."
Terms Offered in Latest ASCAP License Proposal...

THE SOCIETY recognizes in its licensing programs as follows.

1. Network Programs. The license will contain the following:
   a. Limited to non-visual broadcast stations.
   b. Network programs must be cleared at the source.
   c. 10% agency discount, if no actual payroll charged.
   d. Amounts received from political broadcasts, from religious broadcasts

ASCAP at Colleges

ANDERSON, Assistant General Manager

Another facet of the ASCAP "goodwill tour" program is reflected in the lecture tour being made by S. Stephenon Smith, ASCAP educational counselor, to various club and college audiences across the country. Recently Prof.

ASCAP general manager Paine was asked by Broadcasting how much he believed the Society would receive under the proposed plan. He said the amount could not be estimated now because it is impossible to figure the revenue to be derived from the broadcast

Argument for BMI

As an alternative, IRNA pointed to Broadcast Music, ASCAP published its terms for a new deal now instead of December in order to encourage the BMI. It was contended, "Now, if network stations also should view it with caution. The basic reason all affiliates are holding out for clearance was that network programs contain all the popular numbers and many of the factors they can operate locally without ASCAP music as long as the networks continue to feed them. Insofar as the independents are concerned, several of the popular network programs which promote music for education and other events and similar events, provided

ASCAP at Colleges

ASCAP general manager Paine was asked by Broadcasting how much he believed the Society would receive under the proposed plan. He said the amount could not be estimated now because it is impossible to figure the revenue to be derived from the broadcast.

Defining a network program as one originated by one station and re-broadcast on one or more additional stations, the network must be cleared at the source and covered by a network contract with ASCAP for which the license fee is based on a percentage of the gross receipts charged. The rates are determined by the market area.

ASCAP," he stated, "reserves the right to distinguish between network broadcast contracts and deals between individual stations.

(Continued on page 97)
**Excerpts from the Supreme Court Decision**

**The ACT contains no express command that in passing upon an application the Commission must consider the effect of competition with an existing station.**

The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

The broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**No person is to have anything in the nature of a property right as a result of the granting of a license.**

Licenses are limited to a maximum of three years’ duration, may be revoked, and need not be renewed. Thus the channels presently occupied remain free for new assignment to another licensee in the interest of the listening public.

**Economic injury to an existing station is not a separate and independent element to be taken into consideration by the Commission in determining whether it shall grant or withhold a license.**

It does not follow that, because the licensee of a station cannot recover the grant of a license to another, on the ground that the resulting competition may work economic injury to him, he has no standing to appeal from an order of the Commission granting the application.

**“Survival” Theory Upheld**

See page 48 for comments by Washington radio attorneys on the decision of the Supreme Court.

The court was unanimous in holding that the FCC was not required to consider the effect of competition with existing stations in granting crews to new stations. The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**Right of Appeal**

While winning its main contention of unlimited competition, the FCC lost its argument that existing stations have no appealable interest in the outcome of the case since the court found that the FCC was not required to consider the effect of competition with existing stations in granting licenses to new stations. The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**Capital Reactions**

Reactions among Washington radio lawyers were varied in analyzing the opinion. Some viewed it as a distinct victory for the American system of broadcasting, since the court clearly established radio as a non-public utility, reaffirms the Congressional mandate that the Commission regulate the business and specifically alludes to the fact that the Commission has nothing to do with programs, business management or policy. Over, the pointed out that the liberal interpretation of the appellate provisions means aggrieved broadcasters may appeal to the court and that, by the same token, the Commission’s iron-clad policy of preventing interventions in proceedings is opened.

Others, however, found the opinion disquieting because of the feeling that the Commission can be judged only by its past actions. They foresee that it can license new stations without regard to public interest and that the court pointed out that the Commission should not entirely disregard the public interest in competition.

**‘Survival’ Theory Upheld**

On the basis of its technical victories in both the Pottsville and Sanders cases, the Dempsey-Koplovitz team was preparing March 28 to present. The court had affirmed a lower court decision finding that the Commission cannot grant a license to a station which is to be served by another station unless competition is full and free and that the findings of the lower court were upheld.

WILLIAM J. DEMPSEY

---

**Business, Program Control Taken From FCC**

By SOL TAISHOFF

ABSOLUTE POWER to license new broadcast stations, without regard for the effect which the new stations may be suffered by existing stations, was won by the FCC in the Supreme Court of the United States March 25 in a written opinion which at the same time clearly strips the Commission of supervisory control of programs, business management or policy of broadcast stations.

In the most important ruling yet rendered by the highest tribunal in the dozen years that have elapsed since radio regulation began, the court sustained the Commission’s contention that the “survival of the fittest” theory should prevail. In the same opinion, however, the court pegged the sort of super-traffic cop of radio and pointed out that regulation of rates and charges and other measures which would be necessary if competition is to be permitted were specifically forbidden by Congress.

The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**Right of Appeal**

While winning its main contention of unlimited competition, the FCC lost its argument that existing stations have no appealable interest in the outcome of the case since the court found that the FCC was not required to consider the effect of competition with existing stations in granting licenses to new stations. The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**Capital Reactions**

Reactions among Washington radio lawyers were varied in analyzing the opinion. Some viewed it as a distinct victory for the American system of broadcasting, since the court clearly established radio as a non-public utility, reaffirms the Congressional mandate that the Commission regulate the business and specifically alludes to the fact that the Commission has nothing to do with programs, business management or policy. Over, the pointed out that the liberal interpretation of the appellate provisions means aggrieved broadcasters may appeal to the court and that, by the same token, the Commission’s iron-clad policy of preventing interventions in proceedings is opened.

Others, however, found the opinion disquieting because of the feeling that the Commission can be judged only by its past actions. They foresee that it can license new stations without regard to public interest and that the court pointed out that the Commission should not entirely disregard the public interest in competition.

**‘Survival’ Theory Upheld**

On the basis of its technical victories in both the Pottsville and Sanders cases, the Dempsey-Koplovitz team was preparing March 28 to present. The court had affirmed a lower court decision finding that the Commission cannot grant a license to a station which is to be served by another station unless competition is full and free and that the findings of the lower court were upheld.

WILLIAM J. DEMPSEY

---

**Highest Court Upholds Free Competition**

**Excerpts from the Supreme Court Decision**

**The ACT contains no express command that in passing upon an application the Commission must consider the effect of competition with an existing station.**

The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**No person is to have anything in the nature of a property right as a result of the granting of a license.**

Licenses are limited to a maximum of three years’ duration, may be revoked, and need not be renewed. Thus the channels presently occupied remain free for new assignment to another licensee in the interest of the listening public.

**Economic injury to an existing station is not a separate and independent element to be taken into consideration by the Commission in determining whether it shall grant or withhold a license.**

It does not follow that, because the licensee of a station cannot recover the grant of a license to another, on the ground that the resulting competition may work economic injury to him, he has no standing to appeal from an order of the Commission granting the application.

See page 48 for comments by Washington radio attorneys on the decision of the Supreme Court.

The court was unanimous in holding that the FCC was not required to consider the effect of competition with existing stations in granting licenses to new stations. The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**Right of Appeal**

While winning its main contention of unlimited competition, the FCC lost its argument that existing stations have no appealable interest in the outcome of the case since the court found that the FCC was not required to consider the effect of competition with existing stations in granting licenses to new stations. The court held that the broadcasting field is open to anyone, provided there be an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment, and financial ability to make good use of the assigned channel.

**Capital Reactions**

Reactions among Washington radio lawyers were varied in analyzing the opinion. Some viewed it as a distinct victory for the American system of broadcasting, since the court clearly established radio as a non-public utility, reaffirms the Congressional mandate that the Commission regulate the business and specifically alludes to the fact that the Commission has nothing to do with programs, business management or policy. Over, the pointed out that the liberal interpretation of the appellate provisions means aggrieved broadcasters may appeal to the court and that, by the same token, the Commission’s iron-clad policy of preventing interventions in proceedings is opened.

Others, however, found the opinion disquieting because of the feeling that the Commission can be judged only by its past actions. They foresee that it can license new stations without regard to public interest and that the court pointed out that the Commission should not entirely disregard the public interest in competition.

**‘Survival’ Theory Upheld**

On the basis of its technical victories in both the Pottsville and Sanders cases, the Dempsey-Koplovitz team was preparing March 28 to present. The court had affirmed a lower court decision finding that the Commission cannot grant a license to a station which is to be served by another station unless competition is full and free and that the findings of the lower court were upheld.

WILLIAM J. DEMPSEY
After the Supreme Court Victory, What? — An Editorial

IT'S THE "survival of the fittest" henceforth. The U. S. Supreme Court has held that the FCC can license stations indiscriminately, so far as the public interest is concerned, so long as the public interest is served. A licensee, to use the court's language, will "survive or succumb according to his ability to make his programs attractive to the public".

While many broadcasters may not like the opinion, it may prove a blessing, depending upon its administration by the FCC. In holding that free competition should prevail, the court at the same time restated unequivocally that broadcasting is not a public utility and cannot be subjected to rate regulation. More than that, it stated without mincing words that the Commission is given no supervisory control of programs, business management or station policy.

From that standpoint, the decision can only be viewed as a victory for the American system of broadcasting. It means that the FCC itself must mend its ways. The court has ruled that scrutiny of programs, unnecessary snooping into fiscal operation of stations, voluminous questionnaires seeking information on profits, losses, salaries, nepotism, and other operations of stations are no concern of the licensing authority.

A good station, well-managed, does not fear legitimate competition. But broadcasters have been using as a smokescreen regulatory tactics indulged in by the FCC. The Supreme Court's opinion spells out the limitations of the FCC's authority over broadcasting.

If the Commission adheres to the letter and the intent of what henceforth will be known as the Dubuque case, many of broadcasters' worries will be over. The court admonished the FCC not to disregard competition where "go under" or where the public might be deprived of service. That is a safety valve which, if it is to be hoped, the Commission will observe.

Should the FCC flout the new opinion and continue its rampages into programs, as well as figuratively search the file cabinets of stations, it seems to us can be taken to the court under the new law. It is true that the Supreme Court's ruling, except for the technical right of appeal by licensees (which the court broadens) follows closely the philosophy of the FCC's general counsel, William J. Dempsey. For him it is a brilliant victory. But it is also true that while the Bell Department espouses the "free enterprise" theory, "traffic cop" duties as a primary FCC function, the Commission itself has followed an unbridled course of regulation of anything and everything it pleases to take within purview.

Thus it becomes a question of man-power and follow-through. If the FCC adheres to the letter of the Supreme Court ruling and content itself with technical regulation, all will be well. But if, as many suspect it intends, it persists in traveling in its present groove, the only answer will be new court tests and new legislation. "Survival of the fittest" is a laudatory democratic principle just so long as it isn't used as a device to hamstrung the very service Congress intended to provide—public service.

Full Text of The Supreme Court's Decision in 'Economic Injury' Case

Mr. Justice ROBERTS delivered the opinion of the Court.

We took this case to resolve important issues of substance and procedure arising under the Communications Act of 1934. Jan. 20, 1936, the Telegraph Herald, a newspaper published in Dubuque, Iowa, filed with the FCC an application for a construction permit to erect a new station and for a license to operate it in that city. May 14, 1936, the respondent, who had for some years held a broadcasting license for a station WKBB at East Dubuque, Ill., directly across the Mississippi River from Dubuque, Ill., filed an application for a permit to move its transmitter and studio to the last named city and to install its station there.

Aug. 16, 1936, respondent asked the court to intervene in the Telegraph Herald proceeding, alleging in its petition that the areas proposed to be served by the two stations were so close as to preclude the possibility of advertising revenue to support an additional station in Dubuque and insisted that the Telegraph Herald's application for a new station would not serve the public interest, convenience, and necessity. Intervention was permitted and applications were set for consolidated hearing.

Examiner Favored Denial

The examiner in the case found that the Telegraph Herald offered evidence in support of their applications. The respondent alleged that the Telegraph Herald had operated at a loss; that the area proposed to be served by the petitioner was substantially the same as that served by the respondent; and that the petitioner's application was intended to relieve the respondents to support the Telegraph Herald. The Commission, in the majority, found the petitioner unable to support the station's continued operation.

The court referred to the application of the Telegraph Herald. The court held that the Commissioner had the power to deny a broadcasting license if there was no reasonable probability that the license would serve the public interest, convenience, and necessity.

The examiner in the case found that the Telegraph Herald offered evidence in support of their applications. The respondent alleged that the Telegraph Herald had operated at a loss; that the area proposed to be served by the petitioner was substantially the same as that served by the respondent; and that the petitioner's application was intended to relieve the respondents to support the Telegraph Herald. The Commission, in the majority, found the petitioner unable to support the station's continued operation.

The court referred to the application of the Telegraph Herald. The court held that the Commissioner had the power to deny a broadcasting license if there was no reasonable probability that the license would serve the public interest, convenience, and necessity.

First. We hold that resulting economic injury to a rival station is not in and of itself, and apart from considerations of public interest, convenience, and necessity, an element of the petition or objection. If an independent station owner feels that, in a controversy of this nature, the FCC must make findings in passing on an application for a broadcasting license.

§ 307 (a) of the Communications Act directs that "The Commission, if it finds that the granting of such application would not serve the public interest, convenience, and necessity will be served thereby, subject to the limitations of this Act, shall grant to any applicant therefor a station license provided for by this Act." This mandate is given meaning and contour by the other provisions of the statute and the subject matter with which it deals.

The content of the Act and the Commission's interpretation thereof should be given effect to accomplish the purpose of the Act and the regulations intended to effectuate that purpose.

The genesis of the Communications Act and the necessity for the adoption of some such regulatory measure is a matter of record where the number of available radio frequencies is limited. The attempt by a broadcaster to use a given frequency in disregard of its prior use by others, thus creating confusion and interference, deprives the public of the full benefit of radio use. Unless Congress had exercised its authority and set aside the regulatory commission, it would be impossible for the public to have the best broadcasting service.

Not a Common Carrier

In construing the Act to mean that a broadcast station is a common carrier, the FCC interpreted the Act to mean that a broadcast station is a common carrier and that it may not refuse to carry signals or programs.

The policy of the Act is clear that no power can be given the FCC to regulate the nature of a property right as a result of the granting of a license. Licenses are limited to a maximum of three years' duration, may be revoked, and the holder of the license is free to use the channels presently occupied remain free for a new assignment to another licensee in the same field or to a different use.

Plainly it is not the purpose of the Act to impose a common carrier's obligation on the petitioner but to permit a licensee who was not interfering electrically with other stations to use his station without interference.
Spence Resigning From NAB Post

C. E. Arney Is Named as Neville Miller’s Assistant

WITH the long-expected resignation of Edwin M. Spence as secretary to the Northwestern station venture is Stanley Arney, who will be appointed C. E. Arney’s assistant. Arney was created post of assistant to the post January 1, 1939, when Spence became executive secretary of the NAB.

Mr. Spence whose resignation becomes effective May 1, has been on the executive staff of the NAB since its reorganization in 1933. A veteran broadcaster, he was one of the oldest members of the NAB and served for several years as a member of its board and as its assistant-secretary from 1930-1931. He has been the annual convention committee for the last 14 years.

Cigar Participations

WEBST-KEISENLOHR, New York, on April 1 will start a spring campaign for Henrietta and Cinco cigars using six-weekly participations on Musical Clock programs on WKBW, Buffalo, and KVOX, Rochester. Participations will be heard weekly on Tony Wakeham’s Sports Page of the Air daily program on WOL, Washington, N. W. Ayer & Son, New York, handles the account.

Sterling Buys Cummer

STERLING PRODUCTS Co., New York, which recently purchased Ironized Yeast Good Will Hour, which has been heard on MBS for the last two years, to an NBC-Blue network of about 50 stations Sundays, 11-11 p.m. beginning in April 1. The program also will be heard on WMCA, New York, at the same time, that station having the franchise. The program, which previously was carried on Mutual, will be written with film companies for a motion picture to be based on the program. Rathbun & Ryan, New York, is the agency.

Hamilton Watch Test

HAMILTON WATCH Co., Lancaster, Pa., on April 1 started 100-day test of the new Hamilton. The tests were completed on WOW, Omaha, and WHO, Des Moines. H. W. Kastor & Sons, Chicago, is agency.
Baseball Sponsors to Use 100 Stations

General Mills, Atlantic Refining Schedules Are Announced

AGAIN making baseball broadcasting a major part of its summer advertising for Wheaties, General Mills is sponsoring a home game in cooperation with other advertisers, play-by-play descriptions of the 1940 baseball season on more than 50 stations.

Atlantic Refining Co., Philadelphia, also will carry an active baseball schedule this season, including any announced minor league baseball games covering in whole or part of the games of 25 professional clubs. N. W. Ayer & Son, Philadelphia, is the Atlantic agency.

'Welcome Back' Campaign

General Mills, as in former years, will extensively merchandise its baseball broadcasts to the trade and to the public. For this promotion activity is a "Welcome Back" campaign announcing the return of the baseball season, the home team and its broadcast programming to display material in grocery stores; this initial campaign will entail special broadcasts and other ceremonies welcoming the teams home for another season. The Welcome Back drive will cover all cities in which games are to be broadcast.

This year, for the first time General Mills and Procter & Gamble, co-sponsor of the Brooklyn Dodgers games on WOR, Newark, are broadcasting a full series of pre-season games of the team, reconstituted in the studio from wire reports, as an audience-building stunt. Games of the Yankees and Giants, New York teams of the American and National Leagues respectively, are being exclusively sponsored by the R. J. Reynolds Tobacco Co. for Camel cigarettes on WABC, New York, so that the Dodgers fans will have an opportunity to hear the pre-season games to get the metropolitan audience accustomed to listening to baseball on WOR. Last year General Mills, Procter & Gamble and Socony-Vacuum Oil Co. shared sponsorship of the Giants and Yankees broadcasts on WABC as well as the Dodgers contests on WOR and WHN, New York. Mel Allen will announce the WABC games.

General Mills' lineup for this year, with a few more deals still in negotiation, includes three cities in which this company is sponsoring baseball broadcasts. WOR, 680 kc. in which Sonny-Vacuum Oil Co. is co-sponsor, 12 with B. F. Goodrich Co. co-sponsoring, six with Atlantic Refining, two with Procter & Gamble Co., one with Coca-Cola Co., one with Sperry Flour Co. and six cities in which the co-sponsors are not set.

Atlantic's Success

The Atlantic Refining baseball campaign is the largest since the firm started sports broadcasting in 1936, utilizing 48 stations from New England to Florida, with 25 play-by-play announcers handling games of three National, two American, five International, eight Eastern, three South Atlantic and two Piedmont league teams.

Atlantic's advertising manager, Joseph R. Rollins, in charge of the campaign said sports broadcasting has been one of the most successful advertising promotions ever undertaken for his company.

"This is the fifth year that we have sponsored broadcasts of the great American game of baseball," Mr. Rollins said. "In addition, we have also sponsored each full fall and representative list of college football games. The returns from both baseball and football has been most impressive, both from the standpoint of sales and dealer enthusiasm. Last year, in fact, we had the greatest sales record in the history of the company and I am sure that a substantial share of the credit belongs to the interest and enthusiasm created by our broadcast advertising.

"Besides the commercial effectiveness of sports broadcasting, we know from the thousands of letters we receive each year that these broadcasts are also contributing to the happiness of many, who are unable, because of illness or other reasons, to go out and see the games themselves. We also know that these broadcasts have intensified interest in the games with the result that attendance in many parks has been consistently better than it was prior to the time that the daily games were put on the air."

COMPLETE Schedules of General Mills and Atlantic Refining Baseball Games, with co-sponsors, names of announcers and stations will be found on page 95.

Squibb Abandons Plan For Washington Forum; Offered Other Sponsors

PUBLIC forum type of program tentatively scheduled to start soon with sponsorship of E. R. Squibb & Sons [Broadcasting, March 15], has been shelved, Col. W. D. Gilbreth, New York, agency handling the Squibb account. Meanwhile, David Hale of General Forum, Inc., is working with Cici & Presbrey in offering to other prospective sponsors a revised edition of the Squibb Calling Washington program, which places more emphasis on listeners sending in questions for discussion on the program. Titled What Do You Think?, the program would award cash prizes for questions used.

Theodore Granik, director of the American Forum of the Air, who conceived and originated the program, will act as moderator. Under the new plan, members of the board of experts, with weekly guest stars, are Raymond Cockey, Robert Lawton, Hugh Johnson, John Gunther, Sullivan, Jay Franklin, Pierre Van Paassen and others.

Out of the idea of the American Forum on the Air series, now heard sustaining Sunday evening radio series, Outhwaite proposed the Squibb-Franklin program, The American Forum, being syndicated by United Features Syndicate, adjunct of United Press. The newspaper feature is handled by Mr. Granik. The new program proposes to present five spot announcements in the program each week. The syndicated feature also includes a reader poll of opinions presented in the discussions.

Three Stations Granted Better Facilities by FCC

KJMI, Fresno, Calif., operated by the McClatchy Newspapers, on March 21 asked the Federal Communications Commission to increase its night power from 1,000 to 5,000 watts on its station KJMI, 150 kc. Meanwhile, the FCC has granted NBC's request for the use of 171 watts on WOR, 710 kc.

La Palina Cigar Test

CONGRESS CIGAR Co., New York, is testing one-minute musical transactions sponsored by La Palina cigars in three unannounced midwestern cities. If salesman and dealer reaction is good, the series will be expanded. Marschall & Pratt, New York, is agency.

A FLING trip to the West Coast by Ed Plaut (right), president of Lehn & Fink, set off fireworks for the Gracie Allen (center) for President Roosevelt's birthday. Dick Tracy, in which Lehn & Fink are large backers, and Gracie have been touring the country and appearing as guests on other programs. Here Mr. Plaut gets his first taste of Gracie's oratory.

Squibb Abandons Plan For Washington Forum; Offered Other Sponsors

PUBLIC forum type of program tentatively scheduled to start soon with sponsorship of E. R. Squibb & Sons [Broadcasting, March 15], has been shelved, Col. W. D. Gilbreth, New York, agency handling the Squibb account. Meanwhile, David Hale of General Forum, Inc., is working with Cici & Presbrey in offering to other prospective sponsors a revised edition of the Squibb Calling Washington program, which places more emphasis on listeners sending in questions for discussion on the program. Titled What Do You Think?, the program would award cash prizes for questions used.

Theodore Granik, director of the American Forum of the Air, who conceived and originated the program, will act as moderator. Under the new plan, members of the board of experts, with weekly guest stars, are Raymond Cockey, Robert Lawton, Hugh Johnson, John Gunther, Sullivan, Jay Franklin, Pierre Van Paassen and others.

Out of the idea of the American Forum on the Air series, now heard sustaining Sunday evening radio series, Outhwaite proposed the Squibb-Franklin program, The American Forum, being syndicated by United Features Syndicate, adjunct of United Press. The newspaper feature is handled by Mr. Granik. The new program proposes to present five spot announcements in the program each week. The syndicated feature also includes a reader poll of opinions presented in the discussions.

Three Stations Granted Better Facilities by FCC

KJMI, Fresno, Calif., operated by the McClatchy Newspapers, on March 21 asked the Federal Communications Commission to increase its night power from 1,000 to 5,000 watts on its station KJMI, 150 kc. Meanwhile, the FCC has granted NBC's request for the use of 171 watts on WOR, 710 kc.

La Palina Cigar Test

CONGRESS CIGAR Co., New York, is testing one-minute musical transactions sponsored by La Palina cigars in three unannounced midwestern cities. If salesman and dealer reaction is good, the series will be expanded. Marschall & Pratt, New York, is agency.

Squibb Abandons Plan For Washington Forum; Offered Other Sponsors

PUBLIC forum type of program tentatively scheduled to start soon with sponsorship of E. R. Squibb & Sons [Broadcasting, March 15], has been shelved, Col. W. D. Gilbreth, New York, agency handling the Squibb account. Meanwhile, David Hale of General Forum, Inc., is working with Cici & Presbrey in offering to other prospective sponsors a revised edition of the Squibb Calling Washington program, which places more emphasis on listeners sending in questions for discussion on the program. Titled What Do You Think?, the program would award cash prizes for questions used.

Theodore Granik, director of the American Forum of the Air, who conceived and originated the program, will act as moderator. Under the new plan, members of the board of experts, with weekly guest stars, are Raymond Cockey, Robert Lawton, Hugh Johnson, John Gunther, Sullivan, Jay Franklin, Pierre Van Paassen and others.

Out of the idea of the American Forum on the Air series, now heard sustaining Sunday evening radio series, Outhwaite proposed the Squibb-Franklin program, The American Forum, being syndicated by United Features Syndicate, adjunct of United Press. The newspaper feature is handled by Mr. Granik. The new program proposes to present five spot announcements in the program each week. The syndicated feature also includes a reader poll of opinions presented in the discussions.

Three Stations Granted Better Facilities by FCC

KJMI, Fresno, Calif., operated by the McClatchy Newspapers, on March 21 asked the Federal Communications Commission to increase its night power from 1,000 to 5,000 watts on its station KJMI, 150 kc. Meanwhile, the FCC has granted NBC's request for the use of 171 watts on WOR, 710 kc.

La Palina Cigar Test

CONGRESS CIGAR Co., New York, is testing one-minute musical transactions sponsored by La Palina cigars in three unannounced midwestern cities. If salesman and dealer reaction is good, the series will be expanded. Marschall & Pratt, New York, is agency.
Havana Treaty Now Effective; FCC Drawing Up Reallocations

Mexico Deposits Its Ratification Without Any Reservations; Border Stations Seem Doomed

THE HAVANA Treaty became an accomplished fact March 29 when Mexico formally filed with the Cuban Government its ratification of the North American Broadcasting Agreement, thereby clearing the way for what is destined to become "the reallocation of 1940,"

Word was received with satisfaction by the State Department March 29, after weeks of delay, that Mexico's Ambassador to Cuba, Ruben Romero, had deposited the ratification papers with the Havana Government, as the repository nation, and that the final essential act had been taken preliminary to the development of the North American reallocation.

The FCC was notified of the action at its broadcast meeting March 29 and its engineering department immediately was set to the task of completing all preliminary allocation lists for Commission action as quickly as possible. Because the engineering staff has been occupied with matters relating to both frequency modulation and television allocations during the last few weeks, work on preparation of the Havana lists had been delayed.

May Take Several Weeks

It was expected, however, that the lists might be completed within several weeks. Necessary procedure will require detailed staff consideration and evolving of means to notify all stations of their new assignments at the time the lists are deposited, through the State Department, at Havana. FCC sanction, of course, is required and there is no forecasting what exigencies may be involved in final approval of the changes.

T H E Y'RE from Missouri and the other stations marked out in 1937, must submit their revised allocations to the Cuban Government before any final changeover steps can be made. It is naturally presumed there will be conflicts in allocations, and it is anticipated that an engineering conference on these matters will be held shortly after filing of their lists by Canada, Mexico, Cuba and the United States. With that time, the nations can mutually agree upon an identical effective date, or time when all stations will assume their new assignments.

End of Border Stations

While the treaty is designed to spell the swan song for Mexican border stations, such as those operated by Dr. John R. Brinkley and Norman T. Baker, recent visitor to the border report these operators have been assured their radio stations will continue operating.

It is naturally presumed there will be conflicts in allocations, and it is anticipated that an engineering conference on these matters will be held shortly after filing of their lists by Canada, Mexico, Cuba and the United States. With that time, the nations can mutually agree upon an identical effective date, or time when all stations will assume their new assignments.

able sentiment exists, it is understood, for following the "elbow cause" procedure, under which stations would be advised of their new assignments and asked to show cause why they should not be made effective on whatever date the Commission sets for the allocation. The majority of the stations affected already know their new assignments, since they shift only from 10 to 40 kc. in the standard broadcast band. But, of others, however, largely daytime or time-sharing stations, do not know what their assignments will be and as a consequence must await the formal allocation order. All of these presupposes that the FCC will authorize a "rereallocation of frequencies," and will not seek to bring about a far-reaching revamping of the broadcast band.

Big Ice Dealer Drive

NATIONAL ICE ADVERTISERS

Chicago, cooperative association of ice manufacturers and distributors, will sponsor a transcription series during their semi-annual convention to be held March 26-28. The theme of the convention will be "The Big Ice Dealer Drive," with headliners and big names to bring out the importance of advertising and merchandising placed by local ice dealers. Forty-five stations in the first week in April, ten the following week, with others added until the list is complete in late spring. Agency is Donahue & Coe, New York.

James D. House, vice-president of the Crosley Corp., in charge of broadcasting, strongly opposes the granting of licenses to WTVN station and WSAI, Cincinnati, has been elected to the board of directors of the company, although reservations.

C. Coxe, recently named vice-president in charge of manufacturing, were chosen at the annual stockholders meeting March 26. Mr. House (right) is here shown being elected vice-president of the Crosley Corp.
FCC Renews Prize Contest Onslaught

Five More Programs Are Sent Justice Dept.

For Rulings

AGAIN SWINGING into action on programs construed as possible violation of the lottery laws, the FCC March 29 referred to the Department of Justice for further action on a new batch of five prize contest programs. Already pending before the Department by reference last Feb. 8 are the NBC Pot o’ Gold, sponsored by Mead’s Bakery [KBST, Big Spring, Tex.], and a local bakery prize contest on a station in Texas. [BROADCASTING, Feb. 15.]

The new citations are against programs broadcast over individual stations, ranging from locals to 50,000-watt outlets. Cited were Musico, on WGN, Chicago; Songs on WIP, Philadelphia; Especially for You, on WFIL, Philadelphia; Sears’ Grab-Bag, on WISE, Asheville; and The Treasure Chest, on KRLD, Dallas.

Ruling in Illinois Case

The FCC, in referring these prize contests to the Department of Justice, seeks a ruling as to whether they violate Section 316 of the Communications Act which bans the broadcast of “any advertisement or information concerning any lottery, gift enterprise or similar scheme.” It is known that in the case of one of the programs (Musico) a Federal court already has held it does not violate lottery statutes (BROADCASTING Dec. 1, 1939). In this case, Federal Judge Joseph E. Daly, of Peoria, in a test case brought by the owner of the program idea, held that the prize contests sponsored over WGN, Chicago, and WMBD, Peoria, did not violate any statutes or laws dealing with lottery.

This ruling was regarded as one which legally sanctioned prize contest programs of this character. The decree is a bit stronger by the court several days following its judgment, when it added a provision that Musico does not involve considerations for indirectly, from any participant and that the game is one of “skill and not a game of chance.” The program had been sponsored over WMBD by Kroger Grocery & Baking Co.

In the case of Pot o’ Gold, it was learned that the Post Office Department late last year advised the postmaster in St. Louis that newspapers carrying advertising on this program could be accepted under the second class rules. This was regarded as tantamount to a ruling that there was no violation of the lottery statutes insofar as the postal laws are concerned. Section 316 in the Communications Act was nullified virtually bodily from the postal laws.

At the Department of Justice it was reported March 29 that staff attorneys were still working on the Pot o’ Gold case, and Mead’s Bakery [KBST, Big Spring, Tex.] references from the FCC and soon would reach an opinion. The opinion will be given to the FCC and will not be made public by the Department. Attorneys have held that programs similar to Pot o’ Gold do not contain an element of consideration, as the lottery laws are now construed, but it is conceivable that the Department, at the instance of the FCC, might deem it advisable to have a court test to see if a new decision would hold that a “consideration” is involved, since the recipient of an award, under certain circumstances, must be listening.

Fly Critical

Whether or not the programs constitute a technical violation of the lottery statutes, Chairman James Lawrence Fly of the FCC has stated informally that he does not consider them as in the public interest, since in effect radio is in the position of “buying” the audience. Failing to express this view to a group of broadcasters [see page 28].

In the new citations, the FCC did not issue temporary licenses to the stations, as was its former custom. Instead, by referring the matters to the Department, it circumvents a procedure against which there had been serious complaint. Presumably, should the Department hold the programs to be violations of the lottery laws, the FCC then would be in a position to take punitive action.

From New York came word that, despite the recent expressions of the FCC that a prize contests similar to Pot o’ Gold program has been referred to the Department, the Lewis-Howe Co., St. Louis (Tums), the sponsor, is considering a similar series on MBS. Executives of the sponsor company and of Stack-Goble Advertising Agency, in charge of the account, were said to be discussing the matter with MBS executives who were represented as reluctant to clear time for the program unless an adjudication from Washington is procured. The new series is reported to have been tentatively titled Rainbow’s End, and would follow closely the money award formula of Pot o’ Gold. Meanwhile, WWJ, Detroit, is understood to have given NBC notice it will follow the program, following the examples of WFBF, Baltimore, and WDAF, Kansas City.

Cited Programs Described

The FCC, in its announcement regarding the five program refer- ences to the Department of Justice, described them as follows in a press release March 29:

“MuHo [WGN] is sponsored by the National Tea Co., Chicago. Cards are supplied by National Food Stores and other sources. Each card has five rows of squares and five squares in each row. Names of songs are involved. To win a cash prize in this ‘game’ one must be lucky enough to get a card with the songs listed in the broadcast, must listen to the program, and must fill out or check the correct names of the songs or musical selections broadcast, and must be the first to telephone the answer to the radio station.

“Songs [WIP] has similar characteristics, employing cards furnished by the Nevin Drug Co., Philadelphia.

“In Especially for You [WFIL] a wheel is spun to determine from Philadelphia and suburban directories the person who is to be given a chance to win a phonograph record. If the lottery selects a telephone he is called. If he answers the phone and answers two questions satisfactorily he receives a radio. If he does not respond correctly he is given two tickets to Mystery History, a network show.

“Sears’ Grab Bag [WBSJ] involves a wheel similar to the one in front of the Sears’ store in Asheville. The advertising manager of the store telephone stations, the holders of the numbers are in the broadcast audience they receive prizes. If they are not listening in the nearest numbers get the prizes.

“In the Daise Treasure Chest (KRLD) program the announcer selects a number from the Dallas telephone directory. If the party answers the telephone he or she is asked, ‘What is the color of the picture on a new Ford Marquette?’ If the party answers correctly, a prize of $50 is the stake.’

Inquiry Develops Ulmer Ownership

First Texas Citations Heard; Others Slated for April

HEARINGS on five of the seven Texas station revocation citations, involving purported “hidden ownership,” were held March 21 by the FCC, after the pastor-broadcaster admitted that sworn oaths made to the Commission were in error. Yet to be heard, probably in later April, are cases involving stations KAND, Corsicana, which was con- tinued, and KGBI, Brownsville, cited for violation of the prohibition of an unauthorized transfer of management, control and operation.

The FCC had reconvened March 5 and were held through March 21 in Austin, Dallas, Tyler and again in Dallas [BROADCASTING March 16]. Testimony was completed in the cases of KTCB, Austin; KGKB, Tyler; KNET, Palestine; KBJA, Lubbock, and KSAM, Huntsville. Prosecution was handled by George B. Porter, FCC assistant general counsel. With Houston-based FCC attorney, with DeQuincy V. Sutton, FCC head accountant, tes- tifying, was the entire FCC staff, including official and other fiscal factors. Commission George H. Payne presided.

At the hearings, held March 16 and 17, the closed individually and it is presumed proposed findings shortly will be issued by the Commission. In the case of the station of Dr. Ulmer and the testimony of other principals, it was thought an oral action would be recommended.

At the hearings in Tyler, Dr. Ulmer’s home town, the hearer or testified he was in error in connection with reports made to the FCC regarding his voting of his wife’s stock and the amounts of stock he owned, and in connection with other data required by FCC license forms. He has voted his wife’s stock by proxy in several.

The FCC in its March 22 order revoked the license of the Brownsville station, allotted that Ewel Wilson and Ernest E. Wilson, of Corpus Christie, by contract had transferred to Dr. Ulmer and M. D. Gallagher, of Brownsville, possession of the station without having first procured the FCC’s consent. The order also allowed the alleged that Dr. Ulmer and Gallag- her to acquire the station without procuring FCC authorization in violation of the law. Under FCC procedure, the parties involved have 15 days in which to request hearing.

WSAL Loses License

FOLLOWING a brief oral argument March 28, heard by the Commission en banc, the FCC on March 29 affirmed its order revoking the license of WSAL, Salisbury, Md., as of March 31. The action climaxed a futile inquiry, which started in mid-December, into the financial background of the station. Originally issued Oct. 4, 1959, was premised on grounds of false statements as to the station’s financial, and was procured by Frank M. Stearns, WSAL li- cense, in his application for a construction permit in 1937 [BROADCAST- ING, March 1].

GROWTH OF amateur radio is traced in a series of eight half-hour programs, 200 Meters & Down, broadcast on WGAN, Portland, Me., in cooperation with the American Radio Relay League and the local amateur group. This rehearsal show was taken just prior to the opening broadcast despite the fact that it took place the same day. Dick Bates, director, narrator and actor; Gwen Graves; Arthur Owens; Howard Stanley, writer and actor; Russell Dorr, Carl desuze and Dorothy Beyer. Kneeling are Ken Wood- bury, technical advisor, and Raymond Brown Jr.

BROADCASTING • Broadcast Advertising

April 1, 1940 • Page 17
BIRTH of COMMERCIAL FM This Year Seen

Opposition Dwindle at FCC Hearing; Expect Gradual Transition

By SOL TAISHOFF and LEWIE V. GILPIN

THE BIRTH of a new system of broadcasting—likely to have its commercial onset this year—was foreseen after eight days of hearings March 18-28 before the FCC during which a solid phalanx of advocates testified in favor of opening up the ultra-high frequency bands for frequency modulation or "static-free" broadcasting.

If there is any real opposition to FM as a new commercial service to supplement rather than supplant the present standard broadcast structure employing amplitude modulation, it was not evident during the proceedings. There were allocation conflicts, however, with advocates of television, notably RCA, resisting strongly the efforts of organized FM proponents to have assigned to wide-band FM the No. 1 television channel, covering the range from 44 to 50 mc., which, together with the 42-44 mc. range presently earmarked for FM, would provide a sweep of 8,000 kc., or a total of 40 channels of 200-kc. blocks.

Victory for Armstrong

What was expected to be a battle royal between opponents and proponents of wide-band FM turned out to be almost a cakewalk for the disciples of Maj. Edwin H. Armstrong, noted inventor whose basic patent position in wide-band FM made him the key figure in the proceedings. With a personal investment of more than $750,000 in FM development, Maj. Armstrong carried the five FCC members through more than a decade of FM development and predicted the day when listeners voluntarily will tune FM receivers in preference to AM because of its interference-free, high-fidelity characteristics. He stoutly supported FM as a "perfect" broadcast medium.

A gradual transition to FM, covering a period of from seven to ten years, was seen by key witnesses. John Shepard 3d, president of the Yankee and Colonial networks, organizer and president of FM Broadcasters Inc., and the industry's foremost proponent of FM, the Commission heard of experimental operations in which he personally has invested some $250,000 over the last two years.

There were no far-fetched predictions that FM would supplant standard broadcasting overnight. Moreover, the prevailing opinion was that standard broadcasting would never be entirely replaced because FM affords no secondary coverage. The prevailing idea was that there should be a dual system—AM and FM. Insofar as FM is concerned, it also should be broken down into two systems, witnesses suggested, one of high-power stations serving areas of perhaps 100 miles, with limited duplication on channels, and then a multiplicity of stations, as many as 106, on other "local" channels, serving small areas of perhaps 15 to 30 miles.

RCA Favors FM

FM networks were foreseen through use of ultra-high frequency relays (above 100 mc.) with automatic unattended repeaters carrying the same program and spaced at specified distances. Therein witnesses predicted substantial savings in the future, since radio today is estimated to be paying to AT&T and other wire companies some $8,000,000 a year.

The big surprise came when RCA itself plumped for commercial FM, though it appeared to favor narrow-band rather than the Armstrong system of wide-band FM. The RCA case was premised largely on the contention that television would not make wide-band FM (as FM Broadcasters, Armstrong, et al proposed) and that it should be recognized that it will always be necessary for those in outlying and rural areas to be served by standard broadcasting. There is likewise, argued that FM receivers will cost more than standard sets but, based on past radio history, they predicted that as mass production the price would decrease substantially. The round figure for an FM receiver was given at about $100. At the outset, it was felt that receivers would have two chassises and one speaker, so that with the flick of a switch either FM or AM bands could be tuned.

Favorably Inclined

The effort was made to convince the Commission, which had only five of its seven members sitting throughout the hearings, that present broadcast receivers generally should be the FM licenses, operating with full commercial status. There were differences in view points, however, as to whether the same programs should be transmitted over both FM and AM.

Reaction from the bench could only be regarded as favorable, though Chairman James Lawrence Finch, FM, Mr. Armstrong personally has invested $100,000 in ultra-high frequency research. When he observed, on a dozen years experience as a radio and communications commissioner, that it was virtually impossible to widen a wave band once the tolerance is set, but that it is a simple matter to cut it down if that becomes technically expedient. Witnesses had testified that if FM receivers are produced for wide-band reception of 500 kc., as the Armstrong system, they would not be rendered obsolete if the band is subsequently cut in half. The proposal of FM was carried largely by FM Broadcasters, through President Shepard, Paul A. deMars, technical director, and Philip O. Sykes, as counsel, the Armstrong general counsel and former managing director of the NAB.

Must Build Audiences

Mr. Shepard said it would take some time for commercial programs to become as strong as AM, but that an FM network would have to build audiences, since an audience must be built to attract advertisers. But he saw FM replacing AM and operators using only FM transmitters in many areas after a transition of "roughly 10 years," during which the AM transmitter would tend to shrink as the FM audience increased. At the end of that time the advertisers would be reaching both the same markets as at present, he predicted.

During the transition period, said Mr. Shepard, the operator probably would use both AM and FM to maintain an aggregate audience attractive to advertisers until almost a 100% replacement of AM sets is achieved. He pointed out that in the normal course of events about 10% of the receivers are replaced annually and, where FM is available, replacements of these and others probably will be FM or combination sets.

Regarding network operation of FM, Mr. Shepard said he thought NBC or CBS, if of the payment of line charges, could pay the construction and operating costs of a relay system, while a neutral organization such as MBS could apportion the cost as it does at present with line charges. Though no such plan has been worked out beyond the "conversation point", Mr. Shepard said the relay system would develop if the FCC grant licenses.

When the hearings concluded March 28, Chairman Fly asked all participants to submit briefs by April 15.
Five Commissioners Hear Major Armstrong's Testimony

As Major Armstrong unfolded the story of FM development, five of the seven FCC members listened in rapt attention. On the bench (1 to r) T. A. M. Craven, Thad H. Brown, Chairman James Lawrence Fly, Paul A. Walker and F. I. Thompson sat throughout the hearings which began March 18 and lasted two weeks.

NEW APPLICATIONS ARE FILED FOR FM

APPLICATIONS for FM construction permits continue to pour into the FCC at the rate of about one a day, among the latest being filed from NBC seeking FM adjuncts to its stations in Washington, Cleveland, Chicago, Denver and San Francisco. Except for Cleveland, where the 43.4 mc. band is requested with 1,000 watts, all of the applications ask for 1,000 watts on 43 mc. The NBC applications leave it to the Commission to determine, after the hearings, whether to assign wide- or narrow-band FM.

To the list of FM applicants published in the April 1, 1930 issue of Broadcasting would also be added new applications received since that date, all for 1,000 watts, from the operators of WEJ, New Haven, Conn., 42.6 mc.; WNBR, New Bedford, Mass., 43.4; WMC, Detroit, 45.2; WCAR, Cleveland, 43.2; WHDH, Boston, 42.6; WLVA, Lynchburg, Va., 42.8; WJAS, Pittsburgh, 43; WJS, Winston-Salem, N. C., and KROC, Rochester, Minn., 45.2; KPRC, Houston, 43.5.

Fly Promises Fair But Thorough Hearing

With an estimated 300 participants and spectators overlapping the large hearing room in the Interstate Commerce Building and another 100 standing in the corridor, Chairman Fly opened the hearings March 18 with a synopsis of the purposes of the proceeding, promising an "expeditious, fair but thorough-going" hearing for FM's "day in court." In addition, Chairman Fly, Commissioners Brown, Craven, Walker and Thompson attended the opening day. At the FCC table were General Counsel William J. Dempsey, Attorney William H. Barger, Chief Engineer Ed. S. and Assistant Chief Engineer Andrew D. Ring.

Scheduled for a two-hour appearance, Major Armstrong in presenting his case as inventor of the Armstrong FM system accounted for all of the time in the hearing in order to get his testimony until well into March 19. Under questioning by Broadcasting Horace L. Lohnes, Maj. Armstrong traced the history of his radio experience from 1906, when he built his first amateur outfit, through his development of the regenerative circuit in 1912, the superhetereodyne circuit in 1917-18, the super-regenerative circuit in 1920, and finally his patenting of an FM system in 1927. His work on the elimination of static in radio reception dated from 1914, he stated, after he had been graduated from the Columbia U engineering school and joined Michael Pupin, the noted scientist.

Citing the various approaches taken to the static problem during this 25-year period, he commented that although both modulation based on power (AM) and "wave-length modulation" (now known as FM) had been considered, neither was found to amount to much until 1915, with development of the vacuum tube modulator. After that attention was concentrated on amplitude modulation and the present regular broadcast system developed.

Problem of Splitting Signal and Static

About 1920 FM turned up again, Maj. Armstrong related, when it was found that the regenerative circuit amplifying both the broadcast signal and static, researchers were trying to separate two things—the broadcast signal and static—that really were the same. With the advent of AM, it had been decided by 1923 that all that could be done with circuits to eliminate static was to make them shallower as possible to still pick up the broadcast signal—and what static trickled in he wanted to be able to eliminate. Pointing out that the components of static correspond in effect to a series of AM signals.

In the interest of high-fidelity reception, to achieve the greatest differentiation between signal and noise, it is necessary to make the receivable bandwidth as large as possible at the receiver, rather than narrow, Maj. Armstrong declared. He pointed out that it was "very difficult" to develop a transmitter that would allow this, swinging between two distant limits and still "hold fast" in the center to escape distortion.

In June, 1934, Armstrong FM apparatus for experimental operation was installed on RCA's 2 kw. television transmitter in the Empire State Bldg. in New York. Experiments started there immediately,
but in April, 1936, when RCA de- 
clined to increase the power of the 
transmitter apparatus, Maj. Arm-
strong said he undertook to con-
struct his own transmitter, result-
ing in his present FM experimental 
station, W2XMN, at Alpine, N. J. 
Experiments with the RCA trans-
mitter ceased in October, 1935, he 
said, after a series of demonstra-
tions of FM's and AM's relative re-
cision, which is one of the most 
important factors in determining 
its usefulness in broadcasting.

To illustrate FM development at 
the time of these 1936 tests, Maj. 
Armstrong presented a sound on 
tape recording of the relative AM and 
FM signals of the 50 kw. WEAF and 
the 500-watt WMCA, recorded at 
that time during a severe thunder- 
sound. The audible demonstra-
tion indicated the static effect in 
AM transmission, reflected in a 
partial drowning of the WEAF sig-
als and the almost complete 
drowning of the WMCA signal, and 
on the other hand the relatively in-
fluence-free reception of the fre-
quency-modulated signal for the 
same programs. To supplement this 
evidence Chairman Fly requested 
Col. Louis H. A. Sander, to furnish the 
exact dates of the broadcasts, along 
with prevailing U. S. weather reports 
for that day in the vicinity.

Height a Vital Factor 
In FM Operation

Describing the W2XMN plant at 
Alpine, Maj. Armstrong stated that 
although it was constructed for 50 kw. 
operation and licensed for 40 kw., it is actually operating at 5 kw. 
During present experimentation, 
which started in the summer of 
1938, its location on a bluff of 
the Hudson River is advantageous, 
he declared, since height is a ruling factor in radio transmis-
sion, and on the other hand, is a 
relatively slight factor in FM, he 
added. Due to the increasing number 
of spectators, Chairman Fly in reces-
sion, the opening morning session 
announced that the hearing would 
move to the large departmental 
auditorium. As the afternoon ses-
sion started, an estimated 450 pe-
ople were present.

Resuming the stand, Maj. Arm-
strong stated that FM was first 
brought to public attention in No-
ember, 1935, with a paper covering the results of his FM experiments at a New 
York Broadcasting Engineers. Since then developments have fulfilled the predictions he made in his initial conjec-
tions. FM's predominate operation is 
characterized by the success of its 
transmitters, he stated. In May, 1936, 
Maj. Armstrong declared.

THOUGH SOVIET Russia frowns upon "capitalist America" it is not 
advise to gleaning knowledge of the latest development in 
radio. Seated here (1 to r) are V. P. Doro-
lin, V. A. Smirnov and S. I. Ras-
NEW YORK - Without the 
approval, he continued, that in tests through his years of experimenting "FM trans-
mision was incomparably better." The ability of FM transmission to 
discriminate against noise has the practical effect of increasing 
the reception range, he pointed out.

Pursuing further the disparities 
between AM and FM operation, he 
explained that because of reception of 
only the stronger of two or more 
transmitters, efficiency in FM transmis-
sion, and more stations can operate with自由贸易, 
thus increasing the service areas. In addition, he 
said FM lends itself to better re-
duction in service than AM transmis-
sion, while under the FM system 
distortion is dependent on fewer 
channels, as in AM operation.

From every standpoint of 
transmitter design the FM transmitter 
is "the ideal," he declared, explain-
ing that it employs only receiving 
tubes and the FM circuit, alone 
with simple Class C amplification.

W2XMN's high-power amplifying 
tubes have operated 8,000 hours, he 
stated, observing that this would 
not have been possible under AM.

Oyez! Oyez! 

THE NATION'S highest 
courts have nothing on the 
FCC in the way of "court-
room" dignity and prestige, 
though it does, as of April, 1938, 
it became evident to the 400-
odd broadcasters, engineers, 
attorneys and others who at-
tended the FCC hearings, 
that this was the first day of the 
"better" part of the 30-day public 
hearing, held at the FCC building, 
Chairman Fly raps the gavel.

Due to the fault of "eight wise 
men, of whom I was one," high-
fidelity transmission by narrow 
band AM broadcast band is "hopeless," he declared, explaining that the 10-kw. transmitter he used at 
a Hoover radio conference years 
ago is not enough to allow a sub-
stantially perfect reproduction. In 
the ultra-high frequencies, high-
fidelity AM transmission is not possible, he added, but FM still yields higher fidelity, 
not only in freedom from noise but also in range and other charac-
teristics,

Speaking of the success of relay 
experiments, Maj. Armstrong said 
that his experiments indicated 
difference in delayed FM signals, 
that difference has been elimin-
ed in the over-all experiment that 
cuts effects of remodulation and 
demodulation. Automatic relays 
are also being developed and can 
be used. As for service in sparsely populated regions, he said that although he could not at this 
time go into the economic pos-
sibilities of extending relays to 
small communities, he saw the 
development eventually.

Discounting any attempt to 
interpret his championing of FM as 
any indication that the drop-
ing of all AM activities and ex-
perimentation in the ultra-high fre-
quencies was just a phase that 
he only wanted FM to be allowed to 
go ahead. Amplitude modulation 
should be developed before 
FM is developed in the ultra-highs, 
he added.

Discusses Advantages 
Of Wide-Band Service

In a technical discussion with E. 
Jett, FCC chief engineer, on the 
wide-band versus narrow-band trans-
verses, he declared the wider 
the band, within the capabilities of the broadcast equipment. 
In the 200 kc. separation employed in the Armstrong FM system, only 
these three stations could actually 
operate within the 200 kc. space, 
he stated, and these not in the 
same area. Narrow-band transmis-
sion, the inter-station ratio of 
interference will be so small that 
FCC's engineers' 'landmark' from the 
listeners' standpoint, he said. In 
short, he declared, one does not 
get the same immunity in nar-
row-band FM.-See FM.

Continuing on this tack, Maj. 
Armstrong explained that the nar-
row-band means every complex 
becomes the receiver design. Any 
set designed for 30 kc. operation 
would pick up all the stations on 
the wide-band, he said. He cited the 
cases where the FCC engineers after 
many years of experimenting with 
measurements and tests in which 
he stated that narrow-band FM operation 
increased the service radius 2 to 2.5 
times. Switching the wider 20 to 100 kc. 
band, he added 1.4 to 2 over AM.

Reviewing frequency assign-
ments for aural broadcasting above 25 mc., Maj. Armstrong stated that FM operations had been assigned to 40.5-45.9 mc., 117-118 mc., and .8 mc. in the vicinity of 26 mc. Thus, he said, about five channels are provided for FM from a practical standpoint. But, he added, skywave interference in frequencies below 50 mc. is too pronounced for practical purposes, and the 117-118 mc. bands are too high. Among other adjoining assignments are 42-42.5 for AM; 43.5-44.5, facsimile; 41-42, educational. If the 42-44 mc. channels were turned over to FM, it would afford ten 200 kc. channels, he then observed.

Service Problem in Densely Populated East

Using bands in the 42-44 mc. assignment, it would be possible to furnish satisfactory service to large parts of the country, he predicted — enough channels "probably for years to come" in sparsely populated sections, but only enough for "service of a sort" in the densely populated East. Pressed for his estimates of what could be accomplished on 10 channels, Maj. Armstrong said he thought "a pretty good job could be done" in the North Atlantic and New England States if there were no duplications on the 10 channels among New York stations.

He pointed out also that in June, 1938, he had suggested setting aside 5 mc. for FM operation, in the 40 and 80-100 mc. bands, and that recently he advocated a 6 mc. band, taking up the equivalent of one television channel, in view of the rapidly expanding interest in FM development. Questioned on the advisability of taking up one of the channels assigned for television operation, he remarked that "as FM develops, television may find it in the wrong place and should have started higher" in the frequency spectrum.

Balancing the relative services of FM as staticless radio, and television, he declared that FM service in the lower frequencies yields greater possibilities for public service than television, since television is neither as available as FM and as dependable at such distances as 80 miles from the transmitter. He estimated that with 10 channels available, FM could serve about 50% of the potential listeners over the country.

Pressed by Commissioner Craven for further comment on the potential New England service situation with 10-channel operation, Maj. Armstrong stated that two such stations as W2XMN at Alpine and the Yankee transmitter WIXJO on Mt. Asnebushit, each with the same frequency assignment, would "build walls against each other," cutting down the respective service areas. He pointed to the need for two types of stations: "hundreds of local outlets with 'definitely circumscribed' service areas on a single frequency, and others to serve larger areas.

In the ultra-high frequencies, AM service cannot be extended far enough for completely satisfactory service, he declared, because of interference, coverage characteristics and allocation limitations.

Gradual Transition Would Be Necessary

Maj. Armstrong was rather closely questioned by Chairman Fly as well as Commissioner Craven, particularly on service and coverage aspects. While he sought to emphasize the superiority of FM over AM, he nevertheless asserted there was no doubt that the present broadcast system will continue for many years and that the transition to FM, particularly inafer as rural and remote coverage is concerned, would have to be gradual.

He pointed out the competitive advantages of wide-band FM vs. the 40 kc. narrow-band operation, Maj. Armstrong said that it would be impossible, among other things, to multiplex other services on narrow band. For example, he pointed out that regular facsimile transmission can be carried on the 200 kc. wide-band operation without disturbing the transmission.

Pressed for data on the necessary contiguous band desired for nationwide FM coverage, Maj. Armstrong said that if the band 42-44 mc., embracing ten 200 kc. channels were set aside, it would be possible to supply a satisfactory service for a large part of the country. This is particularly true in the Northwest, he said, where coverage of standard broadcast stations is poor, particularly during the "summer static" season.

Maj. Armstrong said he assumed that the present non-commercial educational band of 41-42 mc. would use FM rather than AM, and that this would tend to give FM a "clean sweep" from 41-44 mc. if the FCC followed the recommendations of the FM group.

When Commissioner Brown asked about using FM as a supplement to standard broadcasting, Maj. Armstrong said he felt that a very substantial portion of the population could be given service by FM excluding the wide open spaces. The ten channels to which he had previously referred, Maj. Armstrong asserted, should "start a good service of a sort" in the Northeast. He again predicted that more than 50% of the public could procure adequate service from FM.

Ascertaining that difficulties would be encountered if stations were placed closer than 300-400 miles apart — since each would limit the other — Maj. Armstrong declared that he had not made a complete analysis of the allocations situation and that subsequent witnesses would cover it.

Tells of Interference On Same Frequency

Commissioner Craven specifically inquired whether ten channels with 50 kw. stations could cover the country. Maj. Armstrong said he thought 10 channels could do the job.

Responding to Chairman Fly, Maj. Armstrong asserted that two stations of 1 kw. each would cover the same frequency in Washington and Baltimore, 40 miles distant, and each could render a satisfactory service over its metrologe area without serious interference and with no much area. By the same token, if the 1 kw. FM station operated in Washington and an AM station operated on the same frequency in Baltimore, there would be no greater interference than if the two FM stations operated on the same wave, he said.

Observing that the industry is strongly supporting FM, Maj. Armstrong pointed out that the number of applications pending has passed the 100 mark. All of the applicants, he said, hoped to be authorized to set up stations. He added that he was not sure all applicants for television stations have the same purpose.

Summing up, Maj. Armstrong contended that if the Commission grants FM full commercial status, broadcast stations in urban centers will discard their present "imperfect medium" in favor of "a perfect medium." The substance of his testimony was that at the outset, in any event, rural areas will have to depend upon AM stations of today unless networking of FM on a repeater station basis is developed.

Sees Gradual Shift To FM Receivers

Continuing to explain the attributes of FM operation through a major share of the March 19 session, Maj. Armstrong made it clear he did not expect FM to replace regular AM broadcast service overnight. He feared for AM broadcasting to continue "for a long time," commenting that it was just as foolish to believe AM operations would stop with the introduction of FM as it would be to believe that Model-T Ford cars would stop operating as soon as Henry Ford brought out his modern models.

However, in the normal course of events FM will replace AM, he declared, although it will take years even if all present operators and set owners were to decide to make the switch at once. In the process of evolution, he forecast, "the listener will be the judge," and he probably will start out buying combination AM-FM sets, finally buying only FM receivers as the FM service develops.

Questioned about manufacturing costs, Maj. Armstrong estimated the present FM transmitter cost is comparable to that

(Continued on page 80)
FCC Reopens Television Hearings April 8

RCA is Called to Task for Video Activity

ORDERING suspension of its new rules which would permit "paid commercial" operation of television Sept 1, the FCC March 23 in an unexpected action halted the carpetbagger in its television merchandising and sales efforts which the Commission said might "deadlock" development.

The Commission set April 8 for reopening of hearings to determine whether "research and experimentation and the achievement of higher standards" for television are being "unduly retarded" by RCA's innovative merchandising campaign in New York. The FCC's action came without warning. The immediate effect was to bring to a dead end all of RCA's promotional activity. The action of the FCC was greeted with "amazement" by David Sarnoff, RCA president.

It was revealed that RCA, with a $10,000,000 investment in television research and equipment, might be disposed to consider dropping visual radio altogether. A $2,000,000 budget appropriated for the current year to bring television into practical use in the nation was likewise canceled.

Extent of FCC Power

The FCC's summary action occasioned surprise in other quarters, too. It was clear that there would be repercussions on a number of fronts, particularly since the Commission's authority to move into the field of sales competition and merchandising is questionable.

The action was the result of a 4 to 1 vote.

Commissioner T. A. M. Craven dissented again, and his Commissioner Brown, Walker and Thompson vetoed to reopen the hearings. The two other members, Case and Payne, were absent.

In the New York metropolitan area, where merchandising of television receivers was being concentrated, the action stunned dealers as well as manufacturers. Cancellation of orders for television receivers, both from RCA and GE, were reported. The dealers group of the Electrical & Gas Association took public exception to the Commission's action and petitioned the Commission to rescind its action.

Little Fellowos Protest

In protesting the FCC action, Robert Robbins, president of Cath-Ray Television Corp., New York, said he had "been very close to his business, and that he is 'studying with counsel the possibility of invoking individual FCC members for damages resulting from their action'. He said that when the FCC cracks down, "we hang it but we kill little fellows can't'."

John E. Milliken, president of United States Television Mfg. Corp. in protesting the action, said it affects not only large strong companies which have spent enormous sums in new television receivers, but also small companies who have been working to establish a new art. And although the public wants television now, he said if the new ruling is put into final effect, it will harm smaller operators much more than the "big fellows" for whom it is intended.

Aside from the brief "amazement" statement by Mr. Sarnoff, no further formal comment was made by RCA. It appeared it would hold its fire until the April 8 hearings.

More Rigid Regulation

To the industry as a whole the action was indicative of the new era of rigid regulation launched by the FCC over radio generally.

It marked the first time Commissionprobably chosen to open the regulationists. Commissioner Case, who has usually been aligned with Craven and Brown, is seriously ill in New York. The month thereafter, Payne, who usually votes with the crack-downs, is in Texas holding revocation hearings.

In its formal order (No. 65) suspending the "limited Commercial" rule and ordering the hearing, the Commission recited that when it adopted its television report Feb. 29, "it emphasized that nothing should be done which will "encourage a large public investment in receivers" which by reason of technical advances may become obsolete in a relatively short time. It is this provision which the majority feels RCA is violating with its newspaper and trade-paper promotion fostering visual receiver purchasers, as well as "d random" development of models of RCA receivers [Broadcasting, March 15]."

Referring specifically to RCA and the company's "immediate action being "unduly restraining research and experimentation and the achievement of higher standards for television". The FCC stated that "certain rules and regulations of the rules adopted Feb. 29 may be necessary to promote experimental use of frequencies for television service.

Freezing of Television Feared

By FCC, Says Chairman Fly

WHY THE FCC has switched the television signal from amber to red—until it can reappraise the situation—was revealed March 26 by FCC Chairman James Lawrence Fly.

Amplifying the formal order of March 23. reopening the television hearings on April 8, Mr. Fly told Broadcasting the FCC was anxious that no false start be made. While the new chairman, he said, is" red of the FCC's order [see page 51] he said the majority felt it was necessary to protect the public's interest protected at the outset than to risk a situation that might cause permanent injury to a service destined to become of lasting benefit to the public.

The whole purpose of the FCC's report on television Feb. 29 is to inform manufacturers and experimental television licenses that caution should be exercised and retransmissions to be eliminated. The FCC proposes to fix transmission standards, he declared, but not until it feel an adequate course is available.

Public Reaction

Commissioner T. A. M. Craven, formerly a member of the FCC and a leading dissenter among the five voting members, said be believed the majority's action retards development of television. While he declared there was an honest difference of opinion on reopening of the hearings, he felt it to be against such action, particularly since he, as Chairman of the FCC Television Committee which proposed practical operations, had taken the position that only by such operation in an area like New York could public reaction to visual radio be gauged.

Answering allegations that the FCC is seeking to control what the public should see or hear via radio, Mr. Fly branded such accusations as irresponsible. Television is "in an experimental situation, and the transmitting and receiving must be standardized, he said. If a manufacturer's portion of the public is stampeded into buying receivers capable of reproducing images of only one type of transmitter, the result is "a deadlock" development and "freeze" standards, he declared. Thus that portion of the public would be deprived of improved television, and other manufacturers, rather than foster research and experimentation, would find themselves forced to produce receivers using the present standards and experimental broadcasters likewise find themselves in the same position.

The substance of Mr. Fly's observations was that the Commission under such circumstances might find that the FCC's standards had been preempted and that the public would suffer by being forced to content itself with inferior televisions with new research and development deadlocked. In the light of this, he said, the FCC in the춘 order has emphasized that its note of caution has been disregarded.

In a press release accompanying the order, the Commission said the current marketing campaign of RCA is at variance with the intent expressed in its report and it ignored its finding of strong opposition of the FCC's intensive drive for set sales, since it is the biggest single entity in radio, would tend to freeze standards at the 441-line 30-frame level which it espoused along with the Radio Corporation of America in the face of strong opposition from the Paramount-affiliated DuMont Laboratories and several other manufacturers. The Commission stressed the need for further improvement in the technical quality of television.

In his opening statement the Commission said that not all types of television transmission can be received by any receiver. It is impossible now to decide what type of transmitter will be made standard, it said. It reiterated that receiving sets constructed or on the market today may not be capable of receiving television programs from standardized television transmitters when the art of television is advanced to permit such standardization.

While not mentioned in the Commission's release, it was evident that the majority felt that RCA in its sales promotion did not advise the public that the receivers might become obsolete and that there was no assurance of continued service. It was for this reason that Commissioner Craven raised the question of market standardization, apparently feeling that the Federal Trade Commission and not the FCC is the proper body to regulate unfair competition.

Fears Crystallized Standards

The Commission said in its release, however, that public participation in television experimentation "is desirable only if the public understands that it is experimenting in reception and not necessarily in receiving equipment with a guarantee of its continued usefulness." It added that "television is here to stay, but conceivably present day receivers may for practical purposes be gone tomorrow."

"Promotion activities directed to the sale of receivers," the release said, "denotes a problem. Said Mr. Fly, "the possibility of these instruments being left on the hands of the public, but may react in the crystalizing of transmission standards at high technical levels. Moreover, the possibility of one manufacturer gaining an unfair advantage over competitors can be avoided by immediate action for further research and experimenta-

(Continued on page 50)
"Tune to WHO and see what happened!"

* Without much further comment, we crave to quote from a letter received recently by our Mr. H. R. Gross of the WHO News Bureau. The letter was mailed from Tampa, Florida—some 1800 air miles away!

"Dear Mr. Gross:

"About an hour ago, from our hotel window, we heard some kind of an alarm, but it was left for you, way up in Iowa, to tell us that it was an airplane crash.

"We travel all over the country making several towns and cities a week and have developed the profitable habit of tuning in to you for complete details of last-minute happenings. You give us more than anyone else on the air.

"If we ever go to your city my wife and I shall take the liberty of dropping in to thank you personally for giving us such complete details each night."

Signed

(Name on request)

That's just one isolated case, of course. But every week, WHO receives dozens of letters from points as distant as Georgia, Oregon, Alaska, Vermont, New Zealand and West Virginia! . . . Plus an average of about 10,265 letters per week, from Iowa itself!

How'd you like for us to pull mail for you?
TBS Circuits Closed
TELEPHONE circuits set up for Transcontinental Broadcasting System and maintained by TBS after March 15 despite the failure of the proposed new national network to begin operations, have been dis- continued. At TBS headquarters it was explained that the phone company's traffic department desired to put these circuits into other use since TBS did not need them immediately and the technical department, with the understanding that the phone company would reimburse the circuits where publicis was ready to use them. TBS executives further stated that certain plans were being developed and that they might have some arrangement to make within the month.

WTMA, Charleston, S.C., Sale Approved by FCC
ANOTHER newspaper company has been sold and will be managed by Mr. Robert H. Mangiault, managing editor; H. T. McGee, business manager; Robert Bradford, advertising manager.

WTMA, July 15, 1938, and began operation in March 1939. The owners-founders are W. W. Scroggin, publisher, and Orvin, president and vice-president respectively of the Charleston Atlantic Life Insurance Co., who sold it to the newspaper interests.

Land O'Lakes Discs
LAND OLAKES CREAMERIES Inc., Minneapolis (dairy products) has selected 12 stations for a 39-week radio campaign. These one-hour transcribed shows featuring Edgar A. Guest, poet-philosophist, and Emmett M. Furgason, CBS ace sportscaster. Programs started the last week in May with the following stations:
- KFDC WQAR WCAL WPRK WMAS WHEN WMAQ WJW WCAE WHEC WCCO Trancisions were cut by WBS, Campbell-Mitchun, Minneapolis, handles the account.

Shell's 19 in East
SHELL OIL Co., New York, on March 20 started a four-week campaign for Shell oil and two new Shell gasoline products using two-daily signals or station break announcements on the following 19 Eastern stations:
- WOR New York
- WRCN WNBF WTIC WJSH WCAC WCAO WFBP WBEI WNAC WNEW WZMA WGY WSYR WBT WOR
- WJSY Westboro, Mass.
- WITM Scranton, Pa.
- WJBL White Plains, N. Y.
- WBSY Red Bank, N. J.
- WSSS Woburn, Mass.
- WJLA WJAE Washington, D.C.
- WTAZ Brockton, Mass.
- WJZC XEP WSB Roberts, station president, is a stockholder in the newly-organized Wisconsin Broadcasting System, which comprises five and a half new stations.

Pepsi-Cola News Series To Use Entire CBS Net
PEPSI-COLA Co., Long Island City, which has been sponsoring spot announcements and quarter-hour programs for its soft drink in different localities, will start network broadcasting for the first time April 30 when it sponsors three five-minute news programs every Tuesday, Thursday and Saturday on the entire CBS network of 112 stations. The contract also marks the first time in CBS history that all news stations have been signed to carry one commercial series.

The programs, probably featuring Bob Trout, CBS ace newscaster, as commentator, will be heard at 6:05 p.m., with repeats at 10:55-11 p.m. and 11:15-11:55 p.m., all EDST. The first repeat will reach the central standard and daylight saving time zone, the mountain and Pacific zones, while the second repeat will be heard on these 10 stations in the standard time zone, which also will carry the 6:05-6:05 p.m. period (WABI WNBF WBRW WGAN WWHO WORIC WORC WBAB WCAX). Newell Emmett Co., New York, is agency.

Gillette Razor Preparations To Cover Derby on CBS
GILLETTE SAFETY RAZOR Co., Boston, will sponsor the 86th running of the Kentucky Derby at Churchill Downs on CBS network of 27 stations on May 4. Mel Allen and Ted Husing, CBS sportscasters, will report the color and Bryan Field will cover the actual running of the race. Technicians of WHAS, CBS affiliate in Louisville, will work with CBS engineers in hand-ling program. Also, WORC WORC WORC will also carry the race by special permission. Maxon Inc., New York, is agency.

Throughout Derby Week, April 29-May 4, preliminary broadcasts have been arranged as coast-to-coast sustaining programs. Programs include a talk by J. P. Spang Jr., president of Gillette, and a description of the Colonel's Dinner May 3, with Bryan Field and Ted Husing giving descriptions and interviewing jockeys.

Gillette Safety Razor Co., Boston, through its export division, has launched a campaign for Gillette razors in South America. For the last two months, several spots weekly are heard on major stations. J. Walter Thompson Co., Buenos Aires, is in charge.

Wisconsin Group Organizes Chain
Glen D. Roberts, President Of Seven-Station Hookup
INAUGURATION of a new State network, Wisconsin Broadcasting System Inc., comprising five basic and seven support stations, has been announced by Glenn D. Roberts, Madison attorney who is managing partner of the Wisconsin Broadcasting Corp. of WSAU. Wausau, W. J. Neumann, owner of WIBA, and W. B. Herrold, owner of WRAU, Wausau, are also partners. W. W. Brogan, sales manager of WIBA, and a director of WIBA, Madison, is president of the Wisconsin Broadcasting Corp. of WIBA, and a director of WIBA, W. W. Brogan, and W. B. Herrold, owners of WIBA, sate network, WIBA, Madison, have been named to represent the network.

Mr. Roberts, who, in addition to his interest in WIBA and WRAU, is owner of WIBA, a partner of WSAU, Wausau, business of WIBA, W. W. Brogan, and a sales manager of WIBA, Milwaukee, and a director of WIBA, W. B. Herrold, have been named to represent the network.

Program Service
At present the Milwaukee network is in operation 18 hours per day, 7 days of the week, or 126 hours of sustaining programs daily. The talent staff of the key station has increased from 11 to 41.

In explaining the aims of the network, Mr. Roberts told Broadcast-

ing: "Many Wisconsin stations have suffered to a large degree because programs and network of quality were not available. Quality will always be our byword. Many programs will originate in Madison, home of our network, and cast a wide net to our State government, where good talent and important program material abound.

"We will invest as much money as is necessary to make this the most important network in the State of Wisconsin. Our package rate for entire network will be low enough to attract sponsors of practically any product manufactured.

"Our coverage maps, now nearing completion, will show that these stations have 75% of the State's population in their primary coverage area. Another important feature of the Milwaukee network's payroll comes from this primary area.

"Headquarters will be in the Empire Bldg., Milwaukee.

Absorene on 29
ABSORENE MFG. Co., St. Louis (Absorene, HH, Asoke cleaners), has announced the acquisition of 29 stations in the Midwestern States, involving over 29 stations in the Midwest in its 1940 advertising campaign. Ross

Googd Co., St. Louis, is agency, and Contract account executive.

Stations are:
- WSGN KFEL WATL WMHD WBT WFRD WAMO WAAD WIBC WJSN WIBU WJYR WBSN WDGD WZGO WYOT KZL WZCO WAYS WMBI WBCJ WABC WMLW
- KXH KZL WEIN WWII KWF WUGO WJG KGR KRB WKB KPK KXK KOSB WSS WMBI WCB WSGW WJU WTB WSE
Now...

5000 WATTS
daytime

WXYZ'S NEW TRANSMITTER AND BLAIN-
KNOX VERTICAL ANTENNAE LOCATED
SEVEN AIR MILES FROM DOWNTOWN DETROIT

has more than doubled the

1000 WATTS
nighttime

GUARANTEED GOOD SERVICE AREA
AT NO INCREASE
IN RATES

WXYZ

KEY STATION OF MICHIGAN RADIO NETWORK

5000 WATTS daytime    1000 WATTS nighttime

more MARKETS . . . more LISTENERS . . . more DOLLAR VALUE

NATIONAL SALES REPRESENTATIVE . . . PAUL H. RAYMER CO.
Old Gold Program to Start April 5
With Cal Kuhl having resigned, Mann Holiner, radio director of Lennen & Mitchell, agency servicing the accounts, produced the first few programs of the new Hollywood variety and dramatic show featuring Don Ameche, which starred and was sponsored by P. Lorillard Co., New York (Old Gold cigarettes), on 60 or more NBC-Red stations, Fridays at 10:30 p.m. (EST).

Who will become permanent producer or the show was not revealed. Several are under consideration. Kuhl is on the Hollywood staff of J. Walter Thompson Co., and has been producing the weekly NBC Chase & Sanborn program, shot on location in Brooklyn, (coffee), and other network shows. He was signed by Lennen & Mitchell to produce the Ameche program on a loanout from J. Walter Thompson Co. Kuhl, it is said, felt that various constructions on the program would be started by Cal and his resignation was to save embarrassment both to himself and the network.

Victor Young has been signed as musical director of the new Ameche program, with Pat Friday and the Hits & a Miss handling the vocals. Mark Hellinger's short stories have been dramatized by Jerry Baker and Maxwell Shane, Hollywood writer, heads the writing staff. It is reported that the show will cost P. Lorillard Co. around $7,000 a week, exclusive of network time. Claire Trevor is to take dramatic leads. Tom McKnight heads the writing staff.

Musical Disc Time Spots Planned by Lucky Strike

American Tobacco Co., New York, has completed arrangement of its metropolitan stations for Lucky Strike cigarette to start April 1 on seven New York stations, including WHN (March 15). Transcribed by Victor, the announcements consist of a half minute and will be selected from that week's Lucky Strike Hit Parade program on CBS or Mutual. The opening series announced, as for instance, at 7 a.m. the Hit Parade number seven will be played. It will be played by regular Lucky Hit Parade artists, including Barry Wood, Bea Walt, Orvin Tucker and Bonnie Baker, and the orchestras of Mark Warnow and Kay Kyser.

School Disc Series

Air Conditioning Training Corp., Youngstown, which sponsors Happy Jim Parsons Sunday morning on WGN, Chicago, has planned some 50 stations throughout the country. The transcriptions, supplemented with five-minute programs starting April 1, will run for 26 weeks. National Classified Adv., Youngstown, is agency.

Visiting agency executives stepped backstages to meet stars of the new NBC Good News of 1940 program in Hollywood March 14, with Fred C. Hawkins, Southern California district sales manager of General Foods Corp., sponsoring the show. Among them (1 to r) were Tom Revere, Benton & Bowles, New York vice-president in charge of radio; Donald Cope, Hollywood manager of the program; Karlo Donosky, of the Dallas News, treasurer, and Frank Huntress of the San Antonio papers, vice-president.

Kaltenborn Switches Programs to NBC; Swing and Hale News Series Expanded

Kaltenborn Switches Programs to NBC; Swing and Hale News Series Expanded

After more than ten years of foreign news reporting for CBS, H. V. Kaltenborn, noted news analyst and commentator, has ended his exclusive affiliation with that network to present a series of twice-weekly commentaries on the NBC Red network.

Kaltenborn started this sustaining series on NBC March 30 and will continue to broadcast Saturdays from 7:45-8 p.m. and Sundays 3:45-4 p.m., immediately following NBC's regular news roundups from its European reporters, until April 27 when he sails for Rome. In Europe, Kaltenborn will travel extensively to study the progress of the war and report his findings on frequent broadcasts on NBC.

On May 28, Kaltenborn will begin a three-week series on NBC, the network and stations as yet undecided, under the sponsorship of Pure Oil Co., Chicago, present spots for 62 weeks to Swing's Kaltenborn Edits the News programs on CBS. This CBS series terminates April 26, until which date Kaltenborn will also be heard on NBC on a sustaining basis. It could not be learned from NBC when BROADCASTING went to press whether Kaltenborn would present his broadcasts on NBC or for Pure Oil from Europe or for how long a time he would remain aboard.

Ray Swin's Network

General Cigar Co. has added 13 MBS stations to the twice-weekly newscasts by Raymond Grant Swing, who is particularly noted for his commentaries on international developments during the September, 1939 war crisis in Europe.

General Cigar Co. started sponsorship of Swing's program twice weekly to three MBS stations on Sept. 25, 1939, in the interests of White Owl cigars. On March 25, the company added 12 MBS stations to Swing's Monday and Friday talks, 10:10-10:30 p.m.

Top Cigarettes Spots

R. J. Reynolds Tobacco Co., Winston-Salem, N. C., late in February started a campaign for Top cigarettes using 50-word announce-ments six times weekly on WREC, WRIF, WWAC WSM WPBN WGBT WGBI WTAE KROC WCBS WHKL WMGN WSAW and WWVA. Campaign will run through May 11, according to Wm. Esty & Co., New York, the agency.
WHAS
50,000 WATTS
SELLS
A $2,214,269,000 MARKET

OWNED AND OPERATED BY
The Courier-Journal
The Louisville Times

BASIC CBS OUTLET
LOUISVILLE, KENTUCKY

Nationally Represented by Edward Petry & Co.
Illness of Case Affects FCC Policies; Fly Programs 'Buying' Audience

THE FCC appears destined to function as a six-man agency for several weeks — perhaps longer, due to the continued illness of Commissioner Norman S. Case, who is convalescing at his home in Washington.

Absent from the Commission since Feb. 20, Gov. Case is now said to be well on the road to recovery, but a number of complications which developed may make his convalescence slow. Initially, it was feared he suffered a foot infection. Afterward he contracted pneumonia but passed the danger. The truth of this is now developing, along with phlebitis, an arterial ailment. His physicians report that Case has been virtually cleared up and that all effects of pneumonia now have been passed. The phlebitis was said to be still painful but his general condition is improving.

With the Commission divided on basic policy matters, it was thought Gov. Case's enforced absence might have an important bearing on the outcomes of the six-man agency decisions. He has been aligned rather consistently with Commissioners gravel and Brown on broadcasting policy matters. Commissioners Walker, Thompson and Payne have voted together in a rigid-regulation bloc more or less consistently and Chairman Fly has held the balance.

Because of the FM hearings, which got under way March 18 and are destined to run through the first week in April, few matters of importance have been considered by the Commission recently. Only five members have been sitting at these hearings, with Payne absent in Texas conducting revocation hearings.

'Pot o' Gold' Comes Up

Chairman Fly March 20 met at luncheon with a group of broadcasters representing clear channel stations and discussed informally with them matters pertaining to the regulatory situation. He is understood to have announced the broadcasters about prize award programs, and particularly mentioned the NBC Pot o' Gold as one upon which he looked askance. Without commenting on the legality of the Pot o' Gold, now under scrutiny of the Department of Justice at the FCC's behest, it was reported Chairman Fly held that any programs which place stations in the position of 'buying' their audience cannot be construed as in general public interest.

On the Commission itself there has been little activity aside from the FM hearings. The Network Monopoly report, long overdue, still resides in the office of General Counsel William J. Dempsey in draft form and there appears to be no indication that it will be hurried along. Because of members of the Network Monopoly Committee (Brown, acting chairman, Walker and Thompson) are sitting on the FM hearings, it is hardly thought the committee itself will have opportunity to review the preliminary draft until after the hearings are closed. Moreover, it is now generally expected that the Commission itself, rather than the committee will pass on the report, which is likely to delay its publication even further.

Brown's Reappraisal Due

Meanwhile, no inkling has been given of plans of Commissioner Brown, whose present term on the Commission expires June 30. Commissioner Brown has consistently refused to confirm or deny reports that he will retire upon expiration of his term, presumably to enter private law practice or perhaps to reenter Ohio politics. He was formerly Secretary of State of Ohio. A Republican who has served with the FCC and its predecessor Radio Commission since 1929, first as general counsel, Commissioner Brown could be reappointed if he so desired, it is felt in informed circles. His reappointment has been urged by many broadcasters.

NAB Convention Hotel

DEFINITIVE selection of the St. Francis Hotel as headquarters for the FCC's NAB convention in San Francisco Aug. 4-7 was announced March 21 by Howard Lane, business manager of McClatchy Broadcasting Co., NAB director and chairman of the hotel's committee. One of the largest hotels in the West, the St. Francis is uniquely equipped to handle the expected attendance of upwards of 700.

The NAB convention will feature eleven sessions, including dedication of the new hotel building. Theddd will be conducted by various broadcast executives and industry leaders.

WELCOME to a visit aboard the S.S. Lewis and Clark, Mrs. Grace E. van Amerongen, president of the American Broadcasting Co., March 21 at a luncheon meeting of the Advertising Club of New York. With John Benson, AAAA president, presiding, the AAAA saluted the club's 35th anniversary.

Hearing that no honest citizen can complain when another police officer is added to the force, Mr. Corrigan declared the FTC, through the Wheeler-Lea amendments to the Federal Trade Act, is supplementing the vigilantes in the advertising field, enabling them to dispose of "black sheep," more rapidly. He pointed out also that publishers and advertising men helped draft the Wheeler-Lea Act and worked for its passage. Chronicling the phases through which advertising copy has passed in the last 15 years, Mr. Corrigan observed that the use of humorous, covert doubles from 1936 to 1939, chiefly because radio comedians, comic strips and the movies had created a sense of humor on a national basis.

Birdseye Products Test

FROSTED FOODS SALES CORP., New York, has started a 30-minute test campaign for Birdseye products using a quarter-hour Opinion's broadcast twice weekly on WOKO, Albany. Programs, running since Feb. 20, feature interviews with customers in local stores selling Birdseye foods. Customers are also asked a "question of the day" on some interesting topic. Further radio plans will be made to Emil the conclusion of the test, according to Young & Eubanks, New York, the agency in charge.

Swift Spring Sprouts

SWIFT & Co., Chicago (Vigoro), is running a varied advertising program on WJJD, Chicago; WOW, Omaha, and WGN, Chicago. Contracts are for undetermined lengths. J. Walter Thompson Co, Chicago, is agency.

WERC are the call letters assigned by the FCC to the radio station KSNF, formerly in St. Louis. Eric E. Pa., granted to the Presque Isle Broadcasting Co. (Broadcasting, Mar. 15).
Another Western Electric 50 KW

WJSV transmitter building at Wheaton, Md., showing three tower array.

CBS Outlet for the Nation's Capital...

WJSV
WASHINGTON

The Doherty Circuit...improved stabilized feed-back...automatic line voltage regulators...emergency 5 KW operation...are just a few of the reasons why Columbia selected Western Electric for WJSV. Whether you want a 100 watt or a 50 KW, it will pay you to choose Western Electric—for Better Broadcasting!

Western Electric

Western Electric antenna coupling equipment for the 50 KW transmitter.
Early Risers for 'Breakfast Club' Breakfast

MORE THAN 100 agency, station representatives and members of the press attended the NBC Breakfast Club broadcast March 20 and later a breakfast in the Merchants & Manufacturers Club, as guests of Sidney N. Strotz, NBC vice-president in charge of the Central Division.

During the broadcast Don McNeil, m.c., interviewed several station representatives briefly on the air and both thanked and joked with them for arising at the crack of dawn (studio doors were closed at 7:45 a.m.) to attend the affair despite the heavy snowfall and freezing weather with which Chicago greeted Spring. The stunt was part of a special insignia designed for Mr. Strotz to help sell the Breakfast Club to local or spot advertisers.

At top (1 to r) are June Rollinson, of Russell M. Seeds agency; George Hartman, of the agency bearing his name; George P. Hollinbery and Walter Holden, of the George P. Hollinbery firm. Below (left), McNeil interviews Robert Bonier, of Edward Petry & Co., as Melvin Bromby (above McNeil’s hand) watches. At right Dick Kopf, of Paul H. Raymer, submits to McNeil’s mike.

Union Leader’s New Disics

P. LOBILLARD Co., New York, for its series of quarter-hour twice weekly programs featuring Arthur Godfrey, has arranged with NBC Radio-Recording Division for a second series of 26 programs in the interests of Union Leader Tabbaco. Programs have been presented since February on the following Southern stations: WBIR WQAI KPRC WRAP KGNC KYNO WHTY WPTX WTVQ WMLI WRBL WGPC WDBO WRUF and WRAB. The series, sponsored by the Oil Co., is handled by Edward Petry & Co., of New York.

Omar's Long Series

OMAR MILLS INC., Omaha, is currently running a 39-week schedule of quarter-hour musical programs on eight stations for its Blue Ribbon flour, and a 52-week schedule on three stations for its bakery products. Programs, titled Blue Ribbon Melodies, run on a varied five and six-weekly basis. Stations promoting flour are WLS KOA KXBS WNAH WHO WTM KMJW; bakery products are on WTMX WSBN WFBM. Lyle T. Johnston Co., Chicago, handles the account.

Soil-Off to Extend

SOIL-OFF MFG. Co., Glendale, Calif. (saint cleanser), through Hillman-Shane Adv. Agency, Los Angeles, in a 13-week campaign started in early March, is planning from one to six-weekly participations in programs on KOY KEX KOI, KHQ KGMF KPO KFI KFVD, and will expand coverage to include other territories.

Harms Drops Suit On Record Rights

SUIT of Harms Inc. against RCA Mfg. Co., a test case planned to obtain a Supreme Court decision on the question of whether the right to record a musical selection includes the right to sell an arrangement of the number, or whether the latter is a separate right for which a separate license must be secured from the copyright owner, has been dropped by the plaintiff. Decision not to proceed with the suit is based on the publisher’s feeling that the defense of the recording company violates a previously made agreement between parties that no technical defenses would be offered.

Copyright Act of 1909 gives to recorders the right to record any number which the publisher has previously allowed to be recorded, at a maximum payment of two cents a pressing. Copyright holders claim that this recording right covers the privilege of recording a number according to its published arrangement and that if the recording company uses another arrangement it must secure this additional right from the copyright owner. Standing before the court the opinion that the right to make special arrangements is included in the right to record.

To settle this basic point, a test suit was arranged and Harms filed suit against RCA Mfg. Co., for an injunction to enjoin the use of the Harms number “Renaissance Time” in Paris” under the Victor label. In a three-page complaint it said it had a statutory license to record the number, that the selection has been recorded by another company, that there was no violation of fair use of the record and that the record was made at the solicitation of the copyright proprietor.

Answering charges that the fourth defense is in a technicality and unfair in a test case, R.C.A. states that this defense is not true of any other band and that it is unfair, not technical rather than the exception. According to the company, publishers’ records may be plugged, and they can bring piano copies of new numbers to the recorders or recording bands and ask that records of them be made. Usually, it is stated, only piano scores are provided so that it is necessary for each orchestra to make its own arrangement. If, says RCA, such a defense is unfair, then the publishers should stop the practice.

Came Sign Al Pearce

R. J. REYNOLDS TOBACCO CO., Winston-Salem, N.C., has signed Al Pearce & His Gang for a new program for Camel cigarettes to start June 28, probably on CBS if time can be cleared. Pearce concludes his Wednesday program on wlw for H. O. P. Co., on April 3, that period to be filled with Ben Bernie for American Tobacco Co. Wm. Esty & Co., of New York, handles the Camel account.

NBC has reprinted in booklet form the broadcast copy of the article titled “The Time-Buying Function in Radio Advertising,” by C.H. Hadley, who prepared the article in the 1940 Broadcasting Yearbook.
Beginning June 15 WRC will operate night as well as day on 5,000 watts.

WRC covers 9.4% more radio families, daytime, than any other Washington radio station.

POWER ALONE, of course, does not determine coverage. Frequency and other important factors enter into the picture. That's why WRC, with its favorable frequency of 950 kc continues to offer the best "coverage buy" in the Washington market.

* Based on field intensity maps filed with F.C.C.

Represented Nationally by SPOT Sales Offices

NEW YORK  CHICAGO  SAN FRANCISCO  BOSTON
CLEVELAND  DETROIT  HOLLYWOOD  PITTSBURGH

April 1, 1940 • Page 31
Who Started This Quiz Business?

Jack the Tire Expert Is Described as Originator

By FRED BAKER

Baker, Camden: Sohly & Pondfield

Hartford, Conn.

TO THE FLOOD of questions and answers now on the air waves might be added still another: "Who first started the Radio Quiz anyway?"

All available evidence points to W. M. Hickey, president of Jack the Tire Expert, for the general tire distributer in Hartford, Conn.

It was back in the summer of 1928 that Mr. Hickey was casting about for a good program idea. A parlor game involving questions and answers was then in vogue. It caught Mr. Hickey's attention. And the result was what on Aug. 27, 1928, Jack Says: Ask Me Another was born on WTIC, Hartford.

Today, as far as anybody can determine, this program, which is now in its 12th year, has kept the distinction of being the oldest question and answer game on the air, and is in fact, one of the oldest programs in radio. But in spite of its venerable age, Jack Says: Ask Me Another is still vigorous. A recent survey made in Hartford showed that the interest in this show has held up despite its years.

Jack the Inquisitor

Since the sponsor's business is built around the personality of Jack Whelan, veteran tire man, this same personality is carried over into the program, and Jack himself, as Jack the Inquisitor, addresses the questions directly to the listener. After a seven second interval, the answer is given. Thus the game is kept between Jack and the listener, on the assumption, proven by the program's sponsors, that the answer is the only way to answer the questions themselves.

Questions are informative, entertaining, and timely. Music and sound effects are used, and a prize for the best question submitted each week lends added interest. On many occasions between 1,000 and 1,500 letters a week have been received.

Commercials are made as entertaining as the rest of the program. Timeliness is one of the reasons for the success of these commercials. For instance, in November 1938, when pre-election oratory filled the air, prattle, Hummle & Orme, dealers in Sennator Rumblehorn of Eagle Gulch, Nebraska, exhorted all listening to the polls on General, "Beware of purges." In January 1939, when political "purges" were in the news, Jack's program featured a purge of all soiled and used tires and dismountable tires.

On the day after Orson Welles terrified the country with his Mars attack, a skit on General tires en titled "Earth's Greatest Train Wreck" were prepared. This, however, was not used because of the ticklish situation that immediately developed in radio, but many others equally timely are used.

In the winter of 1938, Hartford County was alarmed by reports of a fabulous wild beast similar to a wolf prowling in the vicinity of Glastonbury. The beast was claimed by the newspapers as a "Glawackus" and attracted national news. Jack sponsored a shortwave broadcast of a Glawackus hunt led by Jimmy Laneri, former airplane pilot for the Martin aircraft in Borneo. The hunt failed.

Squawk or Plug?

But on the following Monday night, Jack Says: Ask Me Another featured an interview with Jimmy Laneri. And this interview brought out the salient fact that the hunt failed because not all the searchers were equipped with General tires. General, it was asserted, run so silently that the cat would have had no warning of the approach.

Another commercial which attracted wide attention was the case of Zeke Peck's parrot. Jack had on the program as guest stars two characters from The Wrightsville Clurian, a popular rural skit over WTIC, Editor Elisha Wright and Zeke Peck. Zeke's pet parrot was supposed to deliver the commercial, but after an elaborate build-up, the parrot refused to speak.

On the following Monday night the parrot went down to the waves after a few moments of coaxing by Zeke, and a tense hush, the parrot did utter out a half-intelligible phrase. Immediately there was a heated argument, Elisha Wright claiming that the parrot had uttered only gibberish, and Zeke hotly protesting that the parrot had actually spoken.

To settle the affair Jack then appeared in the studio, and asked whether or not the parrot had actually said anything about General, and if so, what?

The mail brought over 1,000 different versions of what the parrot said. These covered practically every sales point Jack had ever used in selling General tires, as well as several good testimonials. It proved that Jack's radio advertising had registered effectively in the minds of the listeners.

These are but a few of the devices that have been used on the program to catch and hold attention for Jack's commercials.

In 12 years on the air we've learned some important facts about program as guest stars two characters from The Wrightsville Clurian, a popular rural skit over WTIC, Editor Elisha Wright and Zeke Peck. Zeke's pet parrot was supposed to deliver the commercial, but after an elaborate build-up, the parrot refused to speak.

On the following Monday night the parrot went down to the waves after a few moments of coaxing by Zeke, and a tense hush, the parrot did utter out a half-intelligible phrase. Immediately there was a heated argument, Elisha Wright claiming that the parrot had uttered only gibberish, and Zeke hotly protesting that the parrot had actually spoken.

To settle the affair Jack then appeared in the studio, and asked whether or not the parrot had actually said anything about General, and if so, what?

The mail brought over 1,000 different versions of what the parrot said. These covered practically every sales point Jack had ever used in selling General tires, as well as several good testimonials. It proved that Jack's radio advertising had registered effectively in the minds of the listeners.

These are but a few of the devices that have been used on the program to catch and hold attention for Jack's commercials.

In 12 years on the air we've learned some important facts about selling tires through radio. And we're constantly discovering new ones. There are definite answers, and definite ways of presenting appeals that result in quick sales. A more intangible benefit of the program has been the good-will it generates. Jack Says: Ask Me Another has a friendly, sincere, personal tone that is faithfully followed in script and production. And people respond to this friendliness.

The nearest approach to a test of good-will occurred on St. Valentine's Day, 1940. On the program two nights before Valentine's Day, Jack talked about one of his listeners, a lady 87 years old, who was all alone in the world and living in a convalescent home. He mentioned the fact that he was going to send her a Valentine, but he doubted if she would get any others unless some of the listeners should happen to send her a valentine too.

Two days later Jack, the postman, and the lady were all surprised when over 635 valentines arrived at the convalescent home. In addition to the valentines, the lady received candy, cookies, cake, handkerchiefs, poems, and letters.

She received only a brief mention in the script over WTIC alone, and there was no prize offered, in fact nothing for the listener to gain.

With results like these it isn't hard to see why Jack Says: Ask Me Another is New England's most popular programs.

General Foods Expands Daytime Serial Program

GENERAL FOODS Corp., New York, which has been testing the three-quarter-hour serial Kate Hopkins, Angel of Mercy on nine stations since last October, on April 1 will add more stations to the list, as follows: KFYY KOMO KYV WSBS WMAS WWJ WMER WMC KMBG KTVG WOW WTAG WNAW WKY WPO KDOD WAGA WQAM WYXK WUAM WMPS.

Addition of these stations is in line with a general expansion of daytime serial programs by the agency for its accounts, under the direction of Tom Revere and Kirby Hawkes, who recently joined the agency. A second daytime campaign also starts April 1 for Post Toasties, another product of General Foods, consisting of a quarter-hour five-weekly transmitted serial titled Portia Blake Plays Life. Stations are: WLC WLS KTSP WNAV WOW WYK KMBQ KDQY WPO KFGF KTVG Wprox KGN C RVG KTVG WYXK WWJ WCIR WRC KBK WACO KBX KJGF, and WHO on April 29.

WARM, Scranton, Starting

IN LITTLE more than six weeks from the time it was authorized under Federal Commission order Jan. 25, the new WARM, Scranton, Pa., 100 watts night and 250 day power, will make its debut on the air April 11, according to Lou Pollard, Jessup, Pa., the commercial manager of the station and who owns 49.6% of its stock. The other owner is Charles F. Memolo, farm manager, who will become manager. He also owns 49.6%. Charles R. Capp, formerly an engineer, is general manager of WARM. New York, will be program director. Adolph Osmach, formerly with the ABC network as an engineer. Announcers are being supplied through Patsy Kelly of KOE Scranton. A new power transmitting tower for WARM will be located on the local Anthracite Bridge Co.

Kem Fertilizer Spots

KEM LIQUID PLANT FOOD KEM Liquid Plant Food, who has started its annual spring campaign using daily participations on the Polly Banner, is adding WQAM, New York, and three participations weekly on Myrtle Lobbitt's Home Garden Party program on WIND, Detroit. On April 1, the campaign starts three Women's Radio Journal programs weekly on WIND, Chicago. Kem's commercials will run for the next several weeks, and a special approval is for its RCA throughout, with tower being supplied by the local Anthracite Bridge Co.

Facility Changes in Canada

POWER increases have been authorized for CFUP, Grande Prairie, Alta., 500 watts, and CHSJ, St. John, N. B., from 100 watts to 1,000 watts. CFUP will start its new power over this summer and CHSJ returns to its transmitter ready in the autumn.
Spread it on Thick where it does the most Good

...in "America's Money Belt"

At Our Chinese Friend says, if you want to get rich—go where there's money.

In our primary area there are more than 1,403,000 radio homes . . . all representing folks who need and will buy somebody's refrigerators, or soap, autos, toothpaste, tires, rugs, cereals, shoes, tobacco, cosmetics— and whatever else any modern, 1940 American family needs.

They have the purchasing power, too. For the people who live within our area annually spend $1,-576,659,000. That's more than a billion dollars to be spent this year for somebody's products.

Will they be yours?

With a 3-station combination of WMT* and WNAX, plus either of the Des Moines stations, KRNT or KSO, an attractive combination rate is available. In this way you effectively blanket a market of more than six million persons—for little cost.

For more details about America's Money Belt write the Cowles Stations, Des Moines, Iowa.
Wilson to Add

WILSON & Co., Chicago (Ideal dog food), has started a varying schedule of 100-word participation announcements and five-minute transcribed musical shows on nine stations, and six-weekly five-minute United Press news periods on WMAQ, Chicago. Stations selected are WGY, Schenectady, N. Y.; WIRE, Indianapolis; WPPD, Toledó; WJAN, Cleveland; WBNB, Columbus; WKRC, Cincinnati; WTMJ, Milwaukee; WCAE, Pittsburgh; KSJ, St. Louis. Stations in approximately 10 additional markets will be added in the near future according to A. J. Engelhart, account executive of U. S. Adv. Corp., Chicago, the agency.

BOYS AND BONDS

WGN Show Offers Galaxy of Well-Known Folk

WGN, Chicago, produced a good example of station showmanship on March 12 when Quin Ryan, general manager, staged a show for high school boys from Chicago's public and parochial schools on behalf of Bonds, Chicago clothing manufacturer. Details of Ryan's evening news broadcast.

Mr. Ryan

Gulf plans Spot Drive, Summer Mystery Series

GULF OIL Corp., Pittsburgh, for its spring Spray insecticide campaign, is preparing a new series of 32 twice-weekly quarter-hour transcribed programs featuring Rich Berg. The series will be placed on a large list of stations, as yet unselected, in the entire country. AMP is doing the recording and Young & Rubicam, New York, handles the sales.

On April 28 Gulf will replace its Screen Guild Theatre on CBS with Adventures of Ellery Queen, mystery series, Sundays, 7:30-8 p.m. (EDST). As the Screen Guild show leaves the air, it is estimated the program will have brought $570,000 to the Motion Picture Relief Fund. Gulf started on CBS under Gulf sponsorship in 1938, some 200 screen stars and featured players have donated services at an estimated worth of $787,000. Among these have been 57 whose film contracts specifically forbid radio appearances.

Stations Aid Census

CENSUS Bureau officials indicated that "very satisfactory" response has come from radio stations, both to announce censuses on the air, and to aid the Bureau's requests for cooperation in explaining to the public the purpose of the 10th Decennial Census, to start April 1. Early in March the Census Bureau offered U. S. for- mulae, translated into some 500 different phrases in seven languages of two-voice question-answer scripts based on the schedule of questions. Also plans to aid in 110 other stations of the availability of similar information in script form, designed to supplement the transcribed Uncle Sam Calling series produced by the U.S. Office of Education.

Meloripe Using 4

MELORIPE FRUIT CO., Boston, on March 13 started a 13-week campaign of one-minute announcements to promote the BORO (Buckecrork & Newark) Transcription Service and to feature the Bureau's "Late News" program the only news program heard on the air twice a week. It will go into these phases: Theddb, Metro Transcripts, and the Radio Variety Show. The bureau has not established to be repeated on WNAC, New York, for the 12th month.

Armour Soap Spots

ARMOUR & CO., Chicago (Luxor soaps), has announced a weekly schedule of its quarter-hour transcribed Musical Powder Box show on WBBM, Chicago, WJR, Detroit; WTAM, Cleveland. Lord & Thomas, Chicago, handles the account.

HELLEN MENKENS, the CBS star of CBS for the last three years, on WNBC was chosen radio's "best dressed woman" in a poll of fashion designers and stylists conducted during a broadcast from the Fashion Academy's annual spring luncheon in New York.

Major Networks Provide Numerous Premium, Offers

DIVERSIFIED List of Articles Offered Listening Public

IN ADDITION to cash prize contest offers [BROADCASTING, March 2] additional network offers numerous premium offers for listeners on commercial network programs. With the MBS resulting from current offers of this type on any of its programs, a list of program-offers on MBS, CBS, NBC, is in effect, follows:

NCR-BCD

Colgate-Palmitel-Peet Co., - Ellen Ran- dom Super Stamps, each printed with a face value of $0.02, 10c for 10,100c for 100, and $1 for 1,000.

CBS

Andrew Jergens Co.-The Parker Family (Woodbury soap), four cakes of soap for price of three plus 1c, available at A.S.

Colgate Co.-Colgate Long Life Club, and semi-annual home decorating books, free to members.

Chas. H. Phillips Chemical Co.-Walton Hills, Phillips plums of magnesian toothpaste, Libby Sealed glass, one free with 12c, two with 50c tube of toothpaste, same, free with 73c tube of James and Young Walker Brown on NRC-BCD, and Ammonite of Hughes Science, free with Pillsbury Flour Mill Co.-Women is conducted a pie-making contest, booklet and flower seeds, each for 10c and Pillsbury label.

Frederic & Gamble Co.-Mel Perkins Silverplate, six paddles for 10c, and top box.

Brooks Band - Chase & Sanborn House (Cub coffee), cardboard likeness of Sanborn Roomer, 4c each, one free with each pack of coffee, six 2c, six 1c, one free.

NATIONAL-BCD

Colgate-Palmitel-Peet Co., - Hilltop House (Palmitel soap), jade brooch for three Palmitel wrapper bags and 1c in coins W. & M. & George (Super Soda), eight smoked pepper, two 1c, and 1c, three insulated silverplate teaspoons for Colgate toothpaste; Arch Oboler, free offer on As-Is-Baskets and spot announce- ments before World's Marquis.

Cudahy Fishing Co.-Bachelor's Children (Ditch Cleaner), silver plated cake server for 50c and three outer Dutch labels (The Canada).

General Foods Corp.-Joyce Jordan (Minutio Tapas), free recipe book for writing Kate Smith Speaks (Swansea stamp), column of 3c, and book of stamps, free.

General Mills - by Kathryn Norris (Stash), free recipe folder for writing at box, 1c. Free Bro. (Buy), five packs flower seeds for 10c and 50c from can top.

ECHOES of 'Adam & Eve' COTTAGE INFRINGEMENT suit of $1,000,000 against M.J. W. & Co. and others, filed by Joan Storm, Holly- wood writer, more than two years ago in Los Angeles, was dismissed on March 15 by Federal Judge Harry H. Youngman. The basis of her suit, Love & Appleface, was her belief and use of her copyrighted and much discussed Adam & Eve suit on the NBC Chase & Sanborn hour Dec. 13. Judge Youngman ruled there was not enough similarity to consti- tute infringement. Others named in the suit were Don Ameche, radio writer; J. Walter Thompson Co.; Standard Brands, and RCA.

KANSAS went MBS March 16 when the newly-formed Kansas Network, comprising five outlets, tied into the network. WHB, Kansas City, is the key. Kansas State Radio Network was officially organized March 11 in Wichita. At the session were (seated 1 to r.) Selleck B. Warren, KTSW, Emporia; H. K. Lindley, KFBI, Wichita (which joins about May 1 upon removal from Abilene); P. J. Lauberhagen, KSAI; Don Davis, WHB. Back row, N. E. Vance, KSAI; Herbert Hollister, KFBI; K. W. Trimble, KTSH; Kay Payle, KFBI; and Leo Legeter, KVGB, Great Bend.

Page 34 • April 1, 1940

BROADCASTING • Broadcast Advertising
"Why must I always make allowances?" he yells. "Why can't people give me what I want?"

They had been explaining some of the Musts and Must-Nots of Advertising.

"If I want a daytime news-broadcast on some stations and a hill-billy band for an hour on another, why can't I have them?"

"Or if I want to give one territory twice as much socko in radio as another or fit different merchandising plans to different markets—"

"Or if I want to test three or four shows or get behind a sales drive in the East or the West or the South—"

IF YOU WANT WHAT YOU WANT WHEN AND WHERE YOU WANT IT

Whatever his budget for broadcasting, the advertiser who uses SPOT RADIO can fit it to his plan—flexibly, economically, and with immense satisfaction.

Any length of program, live or transcribed, on few or many stations—network or independent—at best available periods for every time zone. SPOT RADIO is for individualists.

EDWARD PETRY & CO., INC.
Representing leading Radio Stations throughout the United States—individually
Offices in: NEW YORK - CHICAGO - SAN FRANCISCO
DETROIT - ST. LOUIS - LOS ANGELES
From everywhere master showmen... who give character to music for today's radio... are writing their praises of the Hammond Novachord.

And you can quickly, easily discover all for yourself the many reasons for this vigorous enthusiasm for the Novachord—as the world's newest news in music for radio.

You'll find the Novachord is played like a piano... that it produces beautiful piano-like tones... and that, by just turning the Tone Selectors, you can bring in the amazing musical effects of 'cello, flute, guitar, French horn, and dozens of others.

Then, you'll see for yourself how the Novachord will add new appeal... new enthusiasm... to your program-building ideas. And you'll know how the Novachord's vast opportunity for musical expression will give your artists a versatility that never grows old!

Or, if you'd like the proof in advance, write today for the Novachord's Experience in Radio. Address: Hammond Instrument Company, 2989 N. Western Avenue, Chicago.

Hammomd Organ Studios: New York—50 West 57th Street
Los Angeles—3328 Wilshire Blvd. | Hammond Dealers in Principal Cities

As you play the Novachord, just turn the Tone Selectors. Let it add musical effects of violin, clarinet, mandolin, tuba—and actually dozens of others.

The NEW Idea in music—by the Makers of the Hammond Organ!

See...Hear...Play

THE HAMMOND

Novachord

at the Hammond Organ Studios... in the Hammond Building, 50 West 57th Street, New York

Page 36 • April 1, 1940

BROADCASTING • Broadcast Advertising
Disastrous Mine Blast Is Covered by WWVA
THREE hours after the disastrous March 16 mine blast at Willow Grove Mine near St. Clairsville, Ohio, George W. Smith, station manager, Wayne Sanders, program director, and Paul Miller, production manager of WWVA, Wheeling, were at the scene after a fast trip and a 2 1/2-mile walk from the nearest town. For days continuous contact was maintained with the mine office and rescue headquarters.

Besides its broadcasts direct from the mine frequent bulletins were phoned to the Wheeling studios. Recording equipment was used to obtain interviews, with gruesome and tear-jerking material omitted.

WWVA aided in identifying one of the victims.

FOREIGN RATE CARD IS ISSUED BY NBC
FIRST rate card to be issued by NBC to cover international short-wave services since the FCC authorized commercial sponsorship on these channels was made effective as of March 23 and covers the 25-000-watt WRBC, operating on 9570 and 21630 kc., and WNVY, operating on 6100 and 17780 kc. Stations operate six days a week, seven hours daily in the Latin American service, and the card rate is as follows:

<table>
<thead>
<tr>
<th>CLASS</th>
<th>RATE (for periods longer than one hour)</th>
<th>RATES PER 6 MINUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$1.00</td>
<td>$0.17</td>
</tr>
<tr>
<td>B</td>
<td>$0.50</td>
<td>$0.08</td>
</tr>
<tr>
<td>C</td>
<td>$0.25</td>
<td>$0.04</td>
</tr>
</tbody>
</table>

Additional notes:
- Discounts available only on restricted periods.
- Discounts and rebates may be applied to the corresponding one hour rates.

New Benny Contract
GENERAL FOODS Corp. New York (Jell-O), through Young & Rubicam, that city, has signed Jack Benny to a new contract which goes into effect October 6, after his usual summer vacation, when he resumes the weekly Jell-O program on 100 NBC-Red stations, Sunday, 7-7:30 p.m. (EST), with West Coast re-broadcast, 8-8:30 p.m. (PST). The contract starts Benny on his seventh year as Jell-O's and his ninth in radio. The contract, which spanned three years, was signed in June, was the first long-term noncancellable agreement ever signed in radio. Although details of the contract were not disclosed, it is understood that Benny gets a substantial salary increase over his present rate.

Largest single network ever to carry a prizefight was used March 29 when 103 NBC-Blue stations broadcast the heavyweight championship bout between Gene Tunney and Tony Zale in Chicago, Ill. The total represents an almost 500% increase over the 23 NBC-Blue stations first used by Jack Dempsey when it first purchased the broadcasting rights to fights in 1926, and is the largest on NBC this season.

Kirkman's Spots
KIRKMAN & SON, Brooklyn, on March 28 started a campaign for Scott and Parke spot announcements weekly on WWJ, Cleveland, WSPD, Toledo, and WMJF, Youngstown. On April 1, the company starts a three-weekly quarter-hour Italian program, The Veiled Lady featuring Diana Bailey, on WOV, New York, and WPNJ, Philadelphia; 12 foreign language spots weekly on WENY, Buffalo, and five spot announcements weekly on WNAC, Boston, and WSB, Baltimore.

Scott's List of 40
SCOTT PAPER Co., Chester, Pa., on March 25 started its annual campaign for Scott towels and tissues using spot announcements on 40 stations. J. Walter Thompson Co., New York, is agency.
Los Angeles Area
AFM Pact Looms
Higher Pay In Some Cases; Negotiations Harmonious

New WAGE deals and improved working conditions for musicians employed by Los Angeles area major broadcasting stations are being negotiated by Musicians Protective Association, Local 47, American Federation of Musicians. Contracts under which stations have operated for the past year are expired. New agreements in several cases will cover more than the customary one-year period.

While details of all new contracts have not been revealed, it is known that pay classifications for various types of musical work will be increased materially. Most of the details have been worked out harmoniously and no hitches are anticipated to mar a mutual agreement being reached over all contracts, according to both music man and station officials.

KJH Contract

KJH, the Don Lee Broadcasting System key station in Los Angeles, has appointed Dave Rose, Hollywood composer, arranger and pianist, as musical director succeeding Alvin Wood. The station agrees to spend a minimum of $50,000 in wages and employ a minimum of 18 men during 39 weeks of the current year. Wage scale is the current coast-casual rate. When the orchestra is used on transcontinental broadcast, the scale will be at that prevailing rate.

If the orchestra is sold to an advertising agency, the contract can be raised by one-half of the amount paid in wages under sponsorship. The KJH contract for last year, arranged under the AFM blanket pact which expired in January, called for $29,000, but Don Lee Network spent around $26,000, according to Willet H. Brown, assistant general manager.

KMPC, Beverly Hills, Cal., recently granted an increase in power and full-time operation in its orchestra, but will add one man each month until the quota is reached in October. Now a CBS affiliate, KMPC at present is in Class C and will be raised in Class B from July until October. With the new setup, Hugh Lawrence has been appointed musical director of the station, successor to Oliver Alberth, formerly musical director of WCAU in Phila-

ZOUNDS, my heart, away to the battle, prithee! Thus, perhaps, spake Karl O. Wyler, manager of KMPC, El Paso, as he addressed a recent Chevrolet sales meeting dressed in this musketeer's regalia.

The stunt worked so well that he was invited to Phoenix for a similar meeting.

Shredded Wheat in Canada

SHREDDED WHEAT Co., Niagara Falls, Ont. (Cubs) started April 1 an eight-week campaign with 10 transcribed announcements weekly in the stations in Western Canada. Account was placed by Cockfield Brown & Co., Toronto.

Stereophonic Music Recording

Bell Laboratories to Demonstrate Method Said

To Yield Every Sound the Ear Can Hear

BELL TELEPHONE Laboratories will give the first public demonstration of "stereophonic reproduction and recording" at Carnegie Hall, New York, April 9-10. New recording equipment and technique will make possible "recording and reproducing every sound that the ear could have heard initially," the announcement states, continuing that "the listener in Carnegie Hall will have the same spatial sense as to the course of the sounds as if he were seated in the hall and in addition he will hear the music enhanced by variations of loudness, pitch, distance and depth to the interpretation of the original director.

Technique worked out by Dr. Harvey Fletcher and his associates — E. C. Wentz, J. C. Steinberg, W. E. Best, R. Bigley, L. A. Elmer and A. R. Soffel—picks up the original sounds through three microphones at the right, center and left of the stage. Sound currents from each microphone are amplified and recorded on three separate sound tracks on moving film. Since an orchestra or an organ has a volume range much greater than is possible on film, "compression" of the sound track on a photographic film, it is necessary to "compress" the original range of sounds before recording. A fourth track records the amount of compression as an automatic control for the recording of the volume range which must be made in reproduction.

When the film is run through the reproducer, the automatic currents are created, each activating its own set of loud speakers, located at the right, center and left of the stage as were the pickup micro-

Amber baseball will reign over Pine Bluff, Ark., this summer because B. J. Parrish, manager of KOTN, Pine Bluff, pitch-in time in trouble for the Pine Bluff Judges, local entry in the Cotton States League, where the franchise was jeopardized by lack of funds.

When the situation was presented to Mr. Parrish just two days before the league deadline, he put several spot announcements between programs asking baseball fans to tune to KOTN that evening. The mayor, C. G. gentry and several citizens appealed for funds to raise the necessary $750. Radio-equipped cars were stationed in various districts to collect all telephoned contributions. Determined to stay on the air until at least $750 was raised, KOTN six hours later announced that contributions totaled $1,250 and that the Judges would play ball.
DETROIT—
The Greatest Industrial Market in the World Can Be Covered With One Radio Station—

WWJ

Of all the six major industrial regions in the United States, the Detroit area in 1939 was the only area to register an increase in factory employment over 1938, according to the Detroit Board of Commerce. Detroit's gain was 28.7%.

Continuing its rapid pace this year, Detroit's industrial employment index for February stood at 110.7 as compared with 99.3 for February, 1939. This increase represents a gain of some 40,000 workers and brings the total to 380,000 now employed in factory work, alone! Both automobile production and passenger car deliveries in Wayne County (Detroit), have shown a substantial increase thus far in 1940 over the corresponding period of 1939.

Just as Detroit leads the world in industrial activity, so does WWJ lead all Detroit radio stations in listener-interest, coverage of buying-power homes, community service and prestige—qualities of prime importance to advertisers.

Investigate the exceptional sales opportunities offered by Detroit—and WWJ—now!
Revisions Sought
New York Bill
Perry Measure Ignores All Rights of Broadcasters

Although the Perry Bill (Broadcasting, Feb. 1, March 1) was passed by the New York State Senate on March 10, without debate, the State’s broadcasters are hopeful that the Assembly will give its approval to the bill in its present form. In- stigated and supported by the National Association of Performing Artists, and the American Federation of Musicians, the measure is designed to protect the interests of radio performers by making it a lacen to record any radio broadcast or to offer such a recording for sale without the permission of the performers.

As passed by the Senate, the bill included an amendment to the effect that it “is not to apply to any act of recording for private, personal, civil or political use or to any recording of any address or talk on subject of a political, educational, religious or civic nature.”

Committee Appeal

The broadcast interests have appealed to the New York State Assembly, the bill is now under consideration, pointing out that while the measure is designed to protect the interests of artists it does not mention the rights of the broadcasters. They point out that the bill implies that all property rights belong to the performers and so would work an injustice on the radio broadcasters, as it is claimed.

At a public hearing on the Perry Bill by the Committee of both Senate and Assembly it was recommended that a compromise measure, protecting the rights of the performer and those of the artist, be drawn by the conflicting interests, but the NAPA and AFM have shown little interest in attempts by the broadcasters to work out such a compromise. It is reported. Meanwhile, the companion measure to the Perry Bill, introduced by Assemblyman Meyer Goldberg (Manhattan), was killed in committee.

KTRB Is Reorganized

PARTNERSHIP of Thomas R. McTammany and William H. Bates Jr. in the ownership and operation of KTRB, Modesto, Cal., has been broken up, and an application has been filed with the FCC for assign- ment of license to a new company to be known as KTRB Broadcasting Co. Inc. Mr. McTammany has not been active in the operation of the station, and it is understood his interest has been purchased for about $20,000. Mr. Bates, manager, would become controlling stockholder with 3,306 out of 4,000 shares. Qualifying shares would be held by William M. Crosby Co., subsidiary of General Mills; Clyde C. Pelton, branch manager for Washburn-Crosby; and Craney. General Mills and Socony-Vacuum will again co-sponsor the Indians games on WCLE and WKR, with Craney and Hunter doing the play-by-play.

A BUSINESS BUILT BY A BOY
Sponsor’s Young Son Proves Key to Radio—Success of Salt Lake City Firm

EXPANDING to 20 years, a small shop and used-materials yard to a modern plant covering half of one Salt Lake City’s 10-acre blocks, Ketchum Builders Supply Co. gives much of the credit for its growth to the 12 years of an increasing amount of time on KSL, Salt Lake City. During this time the firm doubled its business four separate times and progressed in its use of radio time from spot announce- ments of the necessary forms.

When C. H. Ketchum, manager of the company, decided to branch out into formal programs, he rec- ognized in his 8-year-old son, Bob, an unusual talent for homely philosophy. Pursuing a programming course of keeping all material within the understanding of the average listener, young Bob was put on the air as a Sunday afternoon Boy Philosopher. He has been at it ever since, and today is broadcast substantially the same type of program once each week. Ethel Hagan, who started at the same time, furnishes musical background for the program. The measure protects the interests of the performers.

Five years ago an early morning five-minute strip was added to the KSL schedule. Bob read poems. Although no offer was made, people began writing in for the verses. The format of this program has varied a bit, but Bob continues the same personality that keeps drawing response—and sales—among his listeners.

“We reach customers more directly through radio than any other medium,” comments Mr. Ketchum the elder. “From the very first announcement we felt a definite buying impetus. Although we were using only spot announcements, people would come into our store, would telephone and write in response to our radio program. As a result, from the time we first used radio, we’ve leaned on it more than any other advertising form. Occasionally we use supplementary ads, but KSL draws practically all the radio appropriation. Our business has doubled itself four times since we began using radio, and I honestly believe radio has been a major factor in making the increase possible.”

RALPH L. LEWIS, real estate and insurance agent, who since last May has applied to the FCC for a new 250-watt station on 1570 kc in that community.

YOUTHFUL commentator on the homilies of life—and a veteran at it—is Bob Ketchum, heard regularly as the Boy Philosopher on KSL, Salt Lake City. Young Bob, whose dad, C. H. Ketchum, is head of the Ketchum Builders Supply Co., has been featured on the firm’s programs almost since they were started. He is 16 years old.

FOUR SEPARATE increases in the past five years have been added to the KSL schedule, but the KSL scheduling department is one of the most dependable. ‘From the very first announcement we felt a definite buying impetus. Although we were using only spot announcements, people would come into our store, would telephone and write in response to our radio program. As a result, from the time we first used radio, we’ve leaned on it more than any other advertising form. Occasionally we use supplementary ads, but KSL draws practically all the radio appropriation. Our business has doubled itself four times since we began using radio, and I honestly believe radio has been a major factor in making the increase possible.”

Ralph L. Lewis, real estate and insurance agent, who since last May has applied to the FCC for a new 250-watt station on 1570 kc in that community.

Study of Children
And Radio Urged
Youthbuilders Says Present Plan Gets Adult Views

Survey of children to discover program likes and dislikes of younger listeners is advocated by Sabra Holbrook, executive director of Youthbuilders Inc., New York school district. Commenting on the announcement that the NAB and the new Radio Council of Children’s Programs would make a study of children’s radio hearing (Broadcasting, March 1), she raised the question whether information gathered would be applicable to the needs of the sponsors. “It might interest the field of juvenile radio, says Miss Holbrook, “is prompted by the theory that what the child craves recreationally, he craves because of psychological need.” We are therefore left for the writer of the full story, that it is not commercially profitable to serve the child’s wants, and thus be instrumental in fulfilling our purpose of satisfying these needs.

Lack of Funds

“For that reason we have ourselves been extremely anxious to undertake a national survey among school children which would indicate clearly not only the children’s preferences among programs, but what programs are respon- sible for these preferences plus the outside factors such as age and sex which influence children’s radio choices. Failing ourselves the necessary funds for a national survey, we are now left only hope that some other organization with equal access to school children and with adequate financing may be encouraged to meet this challenge!”

It is claimed by Miss Holbrook that children are listening to the radio advertising for floor wax, shaving cream, coffee and proprietary medicines. The advertising of products such as cold cereals over whose purchase they have an independent voice, has shown little interest in attempts by the broadcasters to work out such a compromise. It is reported. Meanwhile, the companion measure to the Perry Bill, introduced by Assemblyman Meyer Goldberg (Manhattan), was killed in committee.

FORD MOTOR Co., Detroit (autos), has signed Leigh Stevens, Hollywood’s leading radio talent in the CBS Big Band program, sponsored by Lever Bros. (Russo), to conduct the overcoat Ford Sandow Hour, which replaces the Ford Sun- day Band Hour that went to Mar. 19, Jessica Draszezetta will be featured vocalist.

E. W. AND J. C. Lee, owners of Carlsbad, Calif., and Richard T. Simpson, chief engineer of RAWM, Gallup, N. M., are among the prominent newsmen applying to the FCC for a new 250-watt sta- tion. Mr. Simpson is now chief engineer of KWWA.

Also in the group is Harry Hammond, publisher of the Riverside Daily Press.
Carved now in marble in America's most noble memorial, are the immortal words of the Gettysburg Address. Few even among those gathered on the battlefield heard them as they were spoken. Days, weeks, and even months and years were consumed before the speech traveled to all parts of the world. Radio would have winged it to the people instantly.

A Service the Family of RCA Might Have Rendered

The Family of RCA has kept a good many dates with history. As we shape our plans for presenting all sides of the issues of democracy to the people in this election year, we recall one date with history we wish we could have kept. It was before our time. Just suppose there could have been an NBC microphone before the speakers at Gettysburg! Then the greatest words ever spoken by an American would have received an instantaneous world-wide hearing. Out over the two major National Broadcasting Company networks! Across the world via R.C.A. Communications, the radio message service of the Radio Corporation of America! To ships at sea through the radio services of Radiomarine!

The assembled crowd on the battlefield would hear each word clearly, impressively, thanks to a sound system developed in RCA Laboratories and built by the RCA Manufacturing Company. Listeners everywhere would hear a lifelike reproduction of the speech on RCA Victor radios. And motion picture audiences would listen to the address recreated by the RCA Photophone Magic Voice of the Screen.

Record lovers would, of course, turn to Victor for a higher fidelity recording of the American masterpiece. And the Gettysburg Address would be relived time and time again on RCA Victrolas.

You may be sure that the members of the Family of RCA will continue to dedicate themselves to their responsibilities to the people. Whatever radio can do will be done to further the cause of government "of the people, by the people, for the people."

Radio Corporation of America
RADIO CITY, N. Y.
RCA Manufacturing Co., Inc. National Broadcasting Company RCA Laboratories
Radiomarine Corp. of America R.C.A. Communications, Inc. RCA Institutes, Inc.
WITH March winds howling, WLW, Cincinnati, recently sent a special events crew out-of-doors for a first hand description of sugar—inclined by WLW as the first broadcast ever made from a maple sugar camp. Headed by a farm near Xenia, O., Ed Mason (left), farm program director of the station, leads on a big sap barrel to interview D. H. Keiter, 83-year-old farmer, as Mr. Keiter made his rounds among the maples. At right in background, standing in front of the WLW-WSAI mobile unit, is Charles Grisham, of the WLW farm department.

KNX-Philo Campaign Gets Radios for Schools

INSPIRED by a similar campaign conducted during early February by KFPO, San Francisco and KROW, Oakland, KNX, Hollywood, with cooperation of Southern California Philo radio dealers, in March embarked on a two-week effort to secure receivers for more than 200,000 school children in 10 Southern California counties whose classrooms have no sets. [Broadcasting, Feb. 15.]

A mid-February survey conducted by KNX revealed that although every school in Southern California had at least one set, only one in five had a sufficient number of receivers for use of all its students. With this information, KNX sought cooperation of Listenwarter & Gough, Los Angeles Philo distributors, to remedy the situation. During the two weeks, the firm conducted a sales campaign accepting old radios as trade-in on new sets. The old ones were reconditioned and placed in classrooms throughout the Southern California territory without cost to schools. More than 1,500 sets were secured. Success ful was the campaign that Philo distributors are continuing it with plans to place all classrooms in schools in other areas where children are deprived of radio educational programs.

Edson K. Bixby

EDSON K. BIXBY, 62, editor of Springfield Newspapers Inc. and part owner of KFPO and KGDM, Springfield, Mo., as well as KBIX, Muskogee, Okla., died March 17 following an illness of several weeks. Mr. Bixby held 96% interest in the Springfield stations and a 12% interest in KBIX. In poor health from a heart ailment for several years, he suffered a cerebral hemorrage the day before his death. Surviving are his wife, his mother and two brothers.

Misquoted, Says Becker, Submitting File to FCC

JUST to keep the record clear, says Mr. Becker, manager of WJBO, Cumberland, Md., has submitted to the FCC a file of letters and clippings involved in a recent talk before the local Lions Club. The incident arose, Mr. Becker points out, when a local newspaper quoted him as saying that radio “is one of the most taxed and censored industries. The newspaper, the Cumberland News, retracted the story the following day and ran the text of Mr. Becker’s remarks affecting Federal Communications. The file account had been based on notes taken at the meeting by a member of the club.

GAMBLING’S 15th WOR Program’s Anniversary Brings Tributes

JOHN GAMBLING’s Musical Cruise to WOR, which is said to be the oldest continuous program on the air, on March 8 celebrated its 15th anniversary with a special broadcast. Mr. Gambling received a plaque from J. R. Poppele, WOR chief engineer, who was responsible for Gambling’s first radio job as an engineer some 15 years ago, while Frank Braucher, WOR vice-president, gave a short talk.

Announcement of the celebration brought several thousand letters from fans who remembered tuning in when Gambling was first launching the program in 1928.

Major sponsors of the program for the past 10 years are: Colgate-Palmolive-Peet Co., Childs Restaura-nt Mills, Nestle Foods, Martinson’s Coffee, E. R. Squibb & Sons, Adolf Gebe, Thom McAn shoes, Illinois Meat Co., and Clemen- tos Clothiers and Good Shoes and Pepsi-Cola Co. sponsor the program currently, each taking three days per week.

Futile Exercise

WARNER RAY, radio col umnist of the Nashville Times, decided to climb the 878-foot vertical radiator which WSM, Nash ville, claims is the tallest tower. To get into the readers picture as well as words describing the country side as it thrusts from the lofty perch, he took along his camera. Up and up he climbed, hand over hand, desperately fighting fatigue. Finally he reached the top, posed his camera, and fainted. He had forgotten to bring any film for the picture box! WSM and this incident are the end of a story. A station engineer had made the same hazardous ascent to solder a connection at the pinnacle, and who stopped breathless at the top to find his gasoline out of gas.

THE IDEAL RELIGIOUS PROGRAM

Moody Institute Survey Reveals Music-Dramatic Combination Is Preferred

IN AN EFFORT to determine what constitutes the “ideal” religious program, WMIB, the Moody Bible Institute station, Chicago, sent questionnaires to 600 station managers throughout the country. More than 50 of the queries, which contained 20 questions and outlined every possibility for religious programs, were returned.

In the matter of music, the managers expressed a preference for variety, including original compositions, played without orchest rations. Their votes indicated a desire for vocal rather than instrumental music, except for organ or novachord.

In dramas the portrayal of deep, personal religious experiences and the re-enactment of unusual situations in which the Bible has played a part, the dramatization of Bible stories, and portrayals built around well-known hymns, were preferred. Almost half the votes were against sermons, and those who did vote in the affirmative qualified their answer by asking for brevity.

Based on these replies, the ideal program at Moody Institute would consist of a combination of music and dramatics, with music predominating.

Having compiled this information, the Institute is now working on a serial of produced transcribed programs which will be offered to stations free of charge to be used once-weekly on a sustaining basis.

Nielsen Honored For Radio Study

Audimeter Is Main Factor in Award by Chicago Group

FIFTEEN awards for excellence in advertising were made by the Chicago Advertising Club, March 21, in the first of a series of annual awards devised to recognize radio personnel. Competiton was limited to work created and produced in Chicago or 1939.

The major award, issued to the man or woman who has done most in bringing recognition to Chicago advertising, went to A. C. Nielsen, president of the A. C. Nielsen Co., market analysts. Nielsen has pioneered in many research techniques, but won the award principally for his new system of checking the effectiveness of radio advertising.

Audimeter Research

Basic of the technique is the Audimeter, developed by the Nielsen Co. [Broadcasting, May 15, 1938]. The Audimeter is a small mechanical instrument used in radio sets belonging to a scientifically selected sampling of radio listeners. The instrument is set to a specific frequency, and is tuned to test for the extent that the set is in use, during which hours of the day, which programs are listened to and to the exact moment when these programs are tuned in or out. Use of the instrument is combined with inventories of consumer purchases.

In addition to the major award, proficiency in five other categories receive recognition. They are broadcast, advertising, newsmen, program, and to William Connolly of S. C. Johnson & Son.

Winners were announced for Radio Award for ‘Fibber’

In radio, C. S. Johnson & Son won first place for its Fibber McGee & Molly show on NBC-Bedford. (Although this program has since moved to the West Coast, it was moved to Chicago for the annual awards issued by the Chicago Advertising Club, May 21, 1939.) Special acknowledgment was given to Nejelski, landlord, examining the production of the program, and to William Connolly of S. C. Johnson & Son.

Winners were also announced and awards presented by E. R. Richer, chairman of the awards committee. Assisting Mr. Richer with the judging were Walther Buchen, president of the Buchen Co., Chicago advertising agency; Emmons Carri, advertising manager and promotion manager of NBC-Chicago; Leo Burnett, president of the agency bearing his name; G. C. Craig, Jr., Advertising Age; John Gibson of Western Electric; M. B. Herbert, advertising manager of the Colotex Corp.; L. E. Meyer, advertising manager of Interna tional Cottoluent Products; Leo Nejelski, assistant production manager of The Pepsodent Co.; FredẒean, advertising manager of DeLallo Biscuit Co.; and John Carson, Pirie & Scott, Chicago retail department store. Eldon G. Burton, advertising director of LaSalle Biscuit Co., represented the combined awards.

The major award presented to Mr. Nielsen was a polished wood trophy designed and hand-carved by Leo Wolf, Chicago artist. Other awards were encased scrolls.
Programs

Children should be seen

and not heard!

From Canada to Mexico 1,913,588 families

read what's on KGO and KPO tonight

Newspapers don't give away precious space just for fun: So when
72* western dailies, with a combined circulation of 1,913,588,
carry the schedules of KGO and KPO, there must be a reason.

And there is.

These NBC outlets can be heard in Nanaimo, British Columbia... and in Nogales, Arizona. That they are listened to regularly in these cities (and in 44 other metropolitan areas in 30
counties, in 5 states and Canada) is evident—or they wouldn't
appear in the radio logs.

No other San Francisco station can approach this total. No
other is expected to, for KGO and KPO are the most powerful
stations in the San Francisco Bay Region.

When KGO and KPO go on the air it's news in the West.

When KGO or KPO transmits your program, you get this plus
value of millions of impressions—and you get one whale of a
market.

*Checked by Allen's Press Clipping Bureau.

KGO & KPO

SAN FRANCISCO

1,500 KW - 700 KI - 50,000 WATTS - 200 KC.

NEW YORK

CHICAGO

SAN FRANCISCO

BOSTON

CLEVELAND

DETROIT

HOLLYWOOD

PITTSBURGH

BROADCASTING • Broadcast Advertising

April 1, 1940 • Page 43
An Old Dog Learns New Sales Tricks

Store Satisfied There's Something To This Radio Business

By SYDNEY KLEEMAN

Secretary-Treasurer, Frankenberger & Co., Charleston, W. Va.

ience or achievement in the athletic world. A four-minute description is given to his record and also a one-minute historical background of the community in which he grew up. A thorough research enables us to give a concise, brief salute in which that man, his friends, and the community's good will is obtained. Official press releases to daily and weekly newspapers in that community carry a stimulating interest in this broadcast.

Many tests have been made on our program to determine the number of our listeners, the intensity and type, and the extent of our primary and secondary listening areas. In the fall of 1938, a month after the installation of our program, we inaugurated a football contest.

What the Contest Disclosed

The information received from our contest was as follows:
1. The area from which we obtained our contestants was practically identical to our newspaper coverage.
2. The area practically coincided with our established trading territory.
3. Ninety per cent of the contestants came from our own county; 76% of the contestants were men, 17% white, 5% Negro students.

Since the inauguration of our “Salute to the Cities”, and our tie-up with schools and prominent athletic personalities, we have increased our listening audience substantially among grade, junior high school and high school ages.

To stimulate the tension and unusual interest in our program, we interview prominent personalities.

Many years ago, when the Civil War was an actuality instead of a setting for a lengthy novel and lengthier movie, there arose in the West Virginia Hills a retail clothing store. As the years moved forward, Frankenberger & Co. came along. Today Frankenberger & Co. is a West Virginia institution. Like many old-line stores, it eyed radio with suspicion. Finally the Frankenberger board decided to break the ice. In the process it broke precedents and traditions right and left. Did it pay? Will Frankenberger keep using radio? Tune in to these columns at once for the answer.
Indiana's Radio Preference Is Best Reflected in The New Studios Of

W I R E

INDIANAPOLIS

WIRE is now displaying to thousands of Indiana people its new studios and offices ($100,000.00 worth of them) occupying the top floor of the Claypool Hotel in the heart of downtown Indianapolis. WIRE is happy to dedicate them to better serving the large listener-audience that has made them possible. Surely, these new studios combine with the fine new RCA transmitter (recently completed) to best reflect the opinion of the legions of WIRE listeners who have made this their favorite radio station.

These listeners and their faithful response to the messages of WIRE advertisers account for the fact that WIRE is scheduling three times the number of local commercial programs and twice the number of national spot commercial programs of any other Indianapolis station.

We're mighty proud of the position we occupy in Indiana and we pledge continued effort to maintaining our reputation as “Indiana's Favorite Station”.

Day - 5000 WATTS - Night

INDIANA'S ONLY BASIC STATION OF THE NBC RED NETWORK
Mutual Broadcasting System

Represented Nationally By GEO. P. HOLLINGBERY Company
Radio Educators Prepare Agenda

11th Institute to Be Held at Columbus April 29-May 1

At the 11th Institute for Education to be held April 29-May 1 at Ohio State University, Columbus, Chairman James Lawrence Fly, of the FCC, Frank E. Bevil, chairman of the Committee, and Dr. Edward Kirby of the NAB, George V. Denny, of Town Meeting of the Air, and Lyndon Johnson, of People's Platform, will be among the speakers.

Chairman Fly will speak at the annual luncheon on May 1, with Jackson Weller, NBC Western Education director, presiding. Mr. Kirby will address the participants on controversial issues, with A. Schetter, NBC news editor and special events director, presiding. Other roundtable subjects include writing for Radio, Production Workshops, Educational Script Exchanges, Recording for School Use and Engineering. Among other speakers are G. C. Gardiner, president of the International Federation of Printed Clubs, and Leonard Power, research coordinator of the Federal Radio Education Committee.

Personnel Training

Mr. Denny will preside at a session on adult education. Mr. Bevil will address a panel on professional training of radio personnel. H. M. Bevil Jr., NBC research manager, will be chairman of a work study group discussing research in educational programs and Walter, President of the Mutual Broadcasting System, will present the vice-president in charge of programs, NBC, will head a group discussing public service broadcasting. Prof. Byron will conduct a discussion of propaganda.

A joint meeting of the NAB with CBS and NBC station educational directors with Mr. Kirby presiding, will be one of the feature events of the institute which has been scheduled to coincide with the fourth American Exhibition of Recordings of Educational Radio Programs to be held on the opening day of the institute.

Sane Foundation Called Vital to Child Programs

SUCCESSFUL radio programs for children must combine elements which are not only aimed at entertaining the younger but which are also sound and good for him, according to Dr. John J. Morgan, professor of psychology at Northwestern University. He or she who supervises the Little Orphan Annie broadcasts heard over 56 stations in the Mutual Broadcasting System.

"The critical faculties of children," Dr. Morgan said, "are often kept from developing by the syrupy plots, characterizations, suspense, and certainly humor which are not necessarily beneficial to growth. When this rule is followed, the show is not attractive to the child although it may be suitable for him build his own character, and he learns from the characters in the show."

Radio and Education

NEW YORK, March 25 - New Stations Authorized by the FCC During First Three Months of 1940

ALABAMA

WJHO, Opelika-Opelika Broadcasting Co.; partnership of Thomas J. Phillips and Clifford W. Humber, insurance agents; J. H. Orr, auto dealer; Thad Marcum, Thad Marcum Bros., insurance agents; both, 100 watt night and 250 day on 1500.

ARIZONA

KPHO-Phoenix-I-Phoenix Broadcasting Co.; to M. C. Breden, president, Mutual Benefit Society of Phoenix, Granted Jan. 25; 100 watt night and 250 day on 1500.

CALIFORNIA

KMYC, Marysville-CP issued to Marysville Broadcasting Co.; to Marcus E. McLaughlin, publisher of Marysville Star & Delta, 31 shares; George A. Haselby, attorney, vice-president, 3% interest; Elmer Thomas, managing director, 18; Joe Swagerty, attorney, secretary, 6%; Granted Jan. 18; 100 watt on 1420.

DISTRICT OF COLUMBIA

WINX-Washington, CP issued to Lawrence J. Hells, attorney; Granted Feb. 13; 350 watt on 1430.

FLORIDA

WLOF-Orlando-CP issued to Hazelwood Inc.; George B. Hille, civil engineer; Grace Anson, grace, announcer; WJC, Detroit; Jack Zadevski, news editor, WSAF, Savannah; Ken Price, vice-president; WLS, Chicago; WOR, New York; Steve Filipiak (Jan Stevens), vice-president; WBG, WLB, Minneapolis; Sid Treligne, KSAL, Salina; Clinton H. Cooper UP, New York, Michigan; James Seiler, vice-president; Grand Rapids; Charles Harrell, program director; WBBM, Chicago; WJRE, chief announcer, WHLS, Fort Worth; WJIC, Mich.; Shet Sheeh, WJOT, Toledo; WMUW, Nashville; WNET, New York; Geraldine Elliott, continuity writer; WJR, Detroit; Jim Britt, Yankee Network sports; Caddy Swanson, WJ. Walter Thompson Co.; Charles Livingstone, Michigan Network (Green Hartet); Edith Steele, WFLA, South Bend; Edward Johnson, McGraw-Hill, John & Adams, Detroit; Fred Shaffmaster, WMJN, Foxpoint, Wis.; Hazel Mathie, WBBM, Chicago; Dorothy Meade Ohrt, Luz Radio Theatre.

The Chicago Tribune on April 3 is starting a series of dramatic productions entitled Citizen’s of Tomorrow on WGN, Chicago. The shows, to be directed by WGN’s Bert Ulkow, will be built especially for the youth of America and each week a different Chicago high school will present materials for the program. Each high school will have three weeks to prepare its presentation. Philip Maxwell, of the editorial staff of the Tribune will be in charge and will be assisted by the students.

Radio Manufacturers Assn. will hold its annual convention June 31 and July 2 at the Stevens Hotel, Chicago.

Broadcasting - Broadcast Advertising

Page 45 - April 1, 1940

THOUGHHE came to this country from England more than 13 years ago and is now American radio’s foremost manager of network, still follows the English custom of having his tea in the afternoon. At the stroke of four each day all office activity ceases while Jimmy’s tea is served by his secretary, May Coyne. Joke according to Mr. James’ own story, that the custom was instituted by Miss Coyne, who is of Irish descent.

In cooperation with five elementary schools of the Monterey Peninsula in California, KDOY, Monterey is presenting a regular weekly half-hour of transmitted music of the more popular tunes listened to in the classrooms. The music, selected by the instructors themselves, consists of typical excerpts of the works of one or sometimes two of the great contributors to the world’s finest musical achievements which are being studied at the time in the classroom.


CBS and the U. S. Office of Education are cooperating in a dramatic series roof Over America designed to encourage student discussion. The series started March 24, occupying 33 weeks of the 2:30-3 Sunday afternoon period in the Democrat in Action program.

KGPW, Kearney, Neb., is given the all clear this week for much of the improvement for the broadcasting activities of Nebraska State Teachers College. Herbert G. Cushing, college president, in a statement in the fall issue of the college’s Quarterly Bulletin, which is devoted largely to radio and speech activities.

SYMPOSIUM of interviews with South Dakota public officials on the Jos of Your Government series carried by WNAX, Yankton, has been published as a mimeographed booklet by the Governmental Research Bureau of Huron. This booklet is known as the “State Government” booklet is the first of a series to be published by the Bureau following up the radio series, started by WNAX in cooperation with the university’s supplement U. S. Office of Education. The booklet describes the functions of Federal agencies.


BULL sessions of students at Youngstown College are broadcast by WKN, Youngstown, Ohio, under the direction of Professor John Rowley, station disc jockey, and Professor Rowley, station director, serving as moderator.
New NBC Listener's Aid Service wins overwhelming public approval! In only 5 months, more than a million paid orders have been received for Aids that stimulate listener interest and serve as a permanent record of NBC Public Service Programs!

On the Main Streets of the whole country, and on the farms as well, live millions whose enthusiastic interest in NBC Public Service Programs prompted us, not long ago, to inaugurate a new service to the public—Listener's Aids.

This service consists of booklets and pamphlets that stimulate interest in NBC's Public Service Programs. They provide listeners with a permanent record of the programs..."gone, but not forgotten." They expand on the program subjects, and impart extra knowledge. Among the many users are students, teachers and adult groups.

In only 5 months, this new NBC public service has achieved outstanding success. Despite the fact that listeners are required to spend from a dime to a dollar for the published material, well over a million pieces have been ordered.

Most popular of the Aids, which cover such subjects as current events, politics, history, human nature, drama, poetry, art and music appreciation, are these: Reprints of "America's Town Meeting of the Air," Reprints of "Chicago Round Table" discussions, "Pilgrimage of Poetry," based on Ted Malone broadcasts, "Art for Your Sake," color reproductions based on program of same name, and "NBC Music Appreciation Hour" students' work charts and teachers' manuals.

NBC Listener's Aids are another proof that NBC solemnly regards radio as a public service...is always eager to perform its duty in behalf of the public interest.
Radio Attorneys Comment on Supreme Court Decision

PHILIP J. HENNESSEY Jr.  
President
Federal Communications Bar Assn.

A SUPREME Court decision by Justice Nelson Brizo, case and the three decisions of the U. S. Supreme Court at this time, clearly holds that the Communications Act in the interval, might be treated to be that of the short, high with high policy in broadcasting. The Foteville and Heitmeier cases emphasize the failure to provide the Commission's authority and its responsibility. The public interest, convenience and necessity is essential responsibility directly to the public interest. It is important both for the public interest. The standard that be understood as a de novo hearing on the applicability to particular facts, as be responsible, from time to time, in court proceedings.

JOHN W. KENDALL  
Associate, Ben S. Fisher

AN EXCELLENT Supreme Court decision is definitely settling the so-called "economic questions," which is a public interest.

How the Commission will interpret certain of the court's statements remains to be seen. It appears that the decision will have upon intervention by existing stations in cases involving new facilities in the community still seems a matter of conjecture.

Inasmuch as the court recognizes "competition" as a matter of not to be determined by the Commission, the right of the applicant to provide adequate service, and thereby avoid the record, these existing stations will be permitted to participate in involving new facilities for their respective communities.

ORACE L. LOHNESS  
THE DECISION is clear that economic injury is not a separate and independent element to be taken into consideration by the Commission in determining whether it shall grant or withhold a license to a newcomer to the field. The court emphasized that Congress intended to leave competition and the broadcasting business to the courts. But the court, in its decision, still found that the existence of the public interest, convenience and necessity is essential responsibility directly to the public interest. It is important both for the public interest. The standard that be understood as a de novo hearing on the applicability to particular facts, as be responsible, from time to time, in court proceedings.

ARTHUR M. SCAFRED  
THE DECISION on the Supreme Court in the Sanders Brothers case really said in the American System of broadcasting under which stations may engage in free and free competition without supervisory control by the Communications Commission of programs, business management or policy. Although the Commission will have discretion to consider such factors as the nature of such injury, the decision will limit itself to questions of interference, technical, and financial qualifications, and competency of applicants to make proper use of the assigned channel. It is a significant factor that the court held the Supreme Court accepted the thesis of the American System of broadcasting, which may be embodied in the Communications Act.

PAUL M. SEGAL  
I HAVE never heard anybody serious argue that the Commission could not or should not give a license merely because it would make less money as a result. Nor have I ever heard anyone plausibly contend that the Commission should issue so many licenses in any area that nobody can serve the public.

In my opinion, the court has assumed that persons who are "aggravated or adversely affected" really means just what it says. Now that these burning truths have been exclaimed, I hope everybody can go back to work.

PAUL D. SPEARMAN  
THE OPINION of Mr. Justice Roberts in Federal Communications Commission v. Sanders Brothers, Inc., and decides holds:

1. That the licensees of a broadcast station may not be enjoined from entering into new competition which might result in the diminution of the economic injury to him arising from competition and consequent diminution of revenue resulting from the decrease served by an additional station. If the decision is to be taken to mean that the public interest, convenience and necessity is essential responsibility directly to the public interest. It is important both for the public interest. The standard that be understood as a de novo hearing on the applicability to particular facts, as be responsible, from time to time, in court proceedings.

WILLIAM A. PORTER  
THE Commission need no longer consider itself with the purely private effect of competition between an existing station and a proposed station. The effect of such competition is purely private and not within the public interest, convenience and necessity is essential responsibility directly to the public interest. It is important both for the public interest. The standard that be understood as a de novo hearing on the applicability to particular facts, as be responsible, from time to time, in court proceedings.

An existing station claiming economic injury may maintain an appeal, not because it may thereby secure a redress of its private injury, but because it may show that economic injury to the attention of the court. The court may not be able to do anything in bringing about a redress of a public injury.

WHILE Amos 'n Andy (Freeman Gosden and Charles Correll) celebrated 12 years in radio on March 19, the event was marred by first anniversary on CBS under sponsorship of Campbell Soup Co. The event was also marred by the fact that the broadcast was not available due to technical difficulties. The event was also marred by the fact that the broadcast was not available due to technical difficulties. The event was also marred by the fact that the broadcast was not available due to technical difficulties. The event was also marred by the fact that the broadcast was not available due to technical difficulties.

AFTER the lay off of 16 months Ray, N. C., has been announced as a decision to publish daily radio schedules again due to subscriber demands.
MORE PROOF!

that KGW and KEX are your
BEST radio salesmen in the
rich Oregon market...

The old saying "The proof of the pudding is in the eating" goes for radio stations, too. The proof of the sales potency of KGW and KEX in the prosperous Pacific Northwest is in the results obtained by those who are using these stations.

As a matter of record, we quote from the following typical local examples:

FURNITURE
"We credit our KGW-KEX radio advertising as the principal factor in our sales increase. You give us thorough coverage of suburban as well as city areas."
—Gevirtz Furniture Co.

WOMEN'S APPAREL
"KGW has been a decided factor in helping us merchandise our store to the style-conscious women of Portland."
—Obis. F. Berg, Inc.

FLOWERS
"We are renewing our contract for the 7th year because KGW has brought us so many new customers."
—Nick's Flower Home.

BREAD
"We are very enthusiastic about the results we are getting from our morning program to women over KEX."
—Davidson Baking Co.

AUTOMOBILES
"The major advertising factor in the growth of our business has been the use of KGW spots every night for the past three years."
—Ray Barnett Motors, Inc.

PIANOS
"KEX has pulled our sales cost down and pushed our sales volume up. Time and again we have cleared our floor of used pianos by means of our broadcasts."
—United Piano Co.

What KGW and KEX is doing for these and other advertisers it can do for you. To reach responsive minds and pocketbooks in the rich Oregon Market where surveys show that 95% of the homes have radios, use the stations of The Oregonian—KGW and KEX.

RADIO STATIONS OF
THE OREGONIAN
PORTLAND, OREGON

KGW
620 KC
5000 WATTS DAYS
1000 WATTS NIGHTS
NBC RED

KEX
1160 KC
5000 WATTS
CONTINUOUS
NBC BLUE

National Representatives
EDWARD PETRY & CO., INC.
New York · Chicago · Detroit · St. Louis · San Francisco · Los Angeles
Television Hearings Reopen April 8
(Continued from page 22)

When you think of
NEW ORLEANS
you think of:

French Cuisine
and

NEW ORLEANS
50,000 WATTS
The greatest selling POWER in the South's greatest city

When you think of

Promotional Drive

The discussion within the FCC on the new action developed March 22 at an FCC meeting scheduled late in the week because of the hearing on frequency modulation. The main allocation issue at these FM hearings is the assignment of one of the seven television bands for FM, which RCA is strongly resisting. In some quarters it was felt this situation played a part in the decision to reopen the television hearings because the subjects are interwoven in a policy decision the FCC must eventually make on allocations of facilities to each service.

It was reported that the question was first raised two or three days earlier by Commissioner Walker, an ardent advocate of strong regulation, who called the Commission's attention to the RCA Mfg. Co. advertising in newspapers and trade papers as well as dealer tie-in ads promoting sales in the New York area. Because the public was not advised that television is experimental and that the sets may not be useful in the future, and because the prices were cut substantially, Commissioner Walker is said to have taken the view that the Commission's regulations were being flouted. Chairman Fly is understood to have supported this view, and Commissioner Thompson apparently was a ready ally. Commissioner Brown's vote was a surprise since he has teamed with Commissioner Craven on television. It is understood Col. Brown urged an early hearing so the issue might be cleared up as quickly as possible.

Suggests FTC Might Act

Whereas the majority contended the RCA advertising was untrue, Commissioner Craven took the position that even if such were the case, it was a Federal Trade Commission and not an FCC matter. It also was reported that one group felt the advertising did not tell the whole story and was faulted. The question of jurisdiction was debated while the into the hearing room, he was amazed

AMAZED at the action of the Commission, said Mr. Sarnoff. We have...
FCC Order Calling New Television Hearings April 8 . . .

Order No. 65
WHEREAS, the Commission on Jan. 15 to 23, 1940, held extensive public hearings preliminary to the promulgation of rules and regulations governing television broadcast stations; and
WHEREAS, on Feb. 29, 1940, as a result of study of the general problems involved and after consideration of the record made during said public hearings, the Commission found as follows:

1. WHEREAS, in said report, the Commission found as follows: "Actual demonstrations to members of the Commission indicate the need for further improvement in the technical quality of television. The evidence before the Commission reveals a substantial possibility that the art may be on the threshold of significant advances. Research in fact does and should continue in significant phases of the field. ** ** The issuance or acceptance of licensees of experimental television standards by the Commission, especially in combination with the more extensive experimental program service which will in all probability develop under these rules, would have a tendency to stimulate activity on the part both of manufacturers and the public in the sale and purchase of receiving sets for home use. It is inescapable that this commercial activity inspired and then reinforced by the existence of Commission standards would cause a bottleneck of research. To a greater or lesser extent, the arc lamps tend to be frozen at that point. Even more important, nothing should be done which will perpetuate an investment in receivers which, by reason of technical advances whether ultimately introduced, may become obsolete in a relatively short time. ** ** It will be realized, ** ** that the loss to the public by premature purchase in a rapidly advancing field might in a relatively short period exceed many times the present total cost of research."

WHEREAS, on Feb. 29, 1940, accompanying said report, the Commission also issued rules governing television broadcast stations, providing for two types of experimental television stations; and
WHEREAS, since the issuance of said report and rules, certain promotional activities in connection with the sale of television transmission and receiving equipment have been engaged in by the Radio Corp. of America in collaboration with, for or on behalf of, subsidiaries or subsidiaries of said corporation which are licensees of experimental television broadcast stations; and
WHEREAS, said promotional activities may be detrimental to the public interest by unduly retarding research and experimentation and the achievement of higher standards for television transmission; and
WHEREAS, additional rules and regulations or revision or amendments of the rules adopted Feb. 29, 1940, may be necessary in order to promote experimental uses of frequencies for television service and to encourage the larger and more efficient use of radio television service in the public interest;

NOW, THEREFORE, it is ordered, that a further hearing be held beginning April 8, 1940, to determine whether research and experimentation and the achievement of higher standards for television transmission are being unduly retarded by the action of the Radio Corp. of America or its subsidiaries, or any other licensees, requiring any additions, modifications, revisions, or amendments of the rules adopted Feb. 29, 1940, governing television broadcast stations, or other action by the Commission; and whether the effective date for the beginning of limited commercial operations set forth in Section 4.73 Subsection (b) of the Commission's Rules and Regulations should be changed from Sept. 1, 1940, to some subsequent date.

IT IS FURTHER ORDERED, that Section 4.73 Subsection (b) of the Commission's Rules and Regulations be suspended pending further order of the Commission.

CBS Stock Taken Up
ALL of the CBS stock offered to the public March 14 was sold after the close of the market that day, according to an announcement by Harlman Ripley & Co., which headed a group of underwriters for the stock including Lehman Brothers, Glore, Forgan & Co., and W. E. Hutton & Co. (Broadcasting, March 1). Stock sold consisted of 20,000 shares of Class A stock and 80,000 shares of Class B stock, $2.50 par value, and was sold at 23 1/4.

FIRST West Coast sponsor to have a radio program telecast is Roma Wine Co., Lodi, Calif. (wines, grape juice), whose weekly Roma Wine World's Fair Party was broadcast over 35 Don Lee-Mutual Network stations and televised simultaneously via WOXY, Los Angeles, on March 2, from KHJ. While (1 to r) Art Linkletter, m.c. of the program, Gloria Nygard, vocalist and comedienne and C. W. Pierce, announcer-producer of Cesana & Associates, San Francisco agency serving the account, chatted about re-opening of the Golden Gate International Exposition and put in their plugs for Roma wines, Nelson Edwards, telecameraman, focused his camera and released the program to television set owners in the Los Angeles area.

KOA, Denver engineering staff, has developed a new "alarm clock" chimes, simulating the old grandfather clock, to use in broadcasting time signals.

The "home-town station" for almost two million people in three states.

For more information about KWWH, one of the sixteen CBS 50,000 watt stations, inquire of The Branham Company

KWKH
SHREVEPORT
50,000 WATTS
CBS

SERVING THE RICH TRI-STATE MARKET

Broadcast Advertising
April 1, 1940 • Page 51
MEMO... TO ADVERTISING MEN

WOR says... YOU NAME IT THROUGH THE WORLD LIBRARY

If you are vague about the World Library that WOR so generously praises, let us hasten to post you. It’s a medium about which every advertising executive simply must be informed.

Suppose you were partial to Harry Horlick and his great band, and you wanted to go on the air tomorrow. You could. Because Harry Horlick records in World studios and the World stations listed at the right are prepared to broadcast 56 separate programs under the title “Harry Horlick Presents.” It is a brilliant series, professionally programmed, featuring both the Horlick orchestra and the Imperial Male Chorus.

World offers you wide variety in music and programming. Bands like Glen Gray’s and Jimmy Dorsey’s, Richard Himber’s and Frankie Masters’, and special groups like the great Magnante and his Car other bands.

NOTE HOW WORLD PROGRAM SERVICE IS REGARDED IN WIDELY SEPARATE

★ “...the World Library has helped local sponsors sell everything from chop suey to milk, and that includes automobiles, ice boxes, pineapples, shrubs, turkeys, and—well, you name it and we’ve sold it through the World Library.” —WOR, New York

“We have found the World Service to be a valuable adjunct in building up our programs, both from the point of view of sustaining and sponsored programs.” —3 KZ, Melbourne

“World quality, plus World artists, plus World quantity make it the outstanding all-around library service I know. It has made money for me.” —WJR, Detroit

“In the past we have used only about half of the scripts, preferring to build our own shows for the rest of the time. However, after studying each of your new shows very carefully we have set up our 1940 schedule using every single one of them.” —KGMB, Honolulu

“...the World Library has been a tremendous asset to us.” —WTIC, Hartford

“World Broadcasting is possible for WHA, its audience and its programs of all program standards.” —WOR, New York

“...the World program for everyone, block with requests when possible.” —B Ride

WORLD BROADCASTING STUDIOS AT NEW YORK, CHICAGO, HOLLYWOOD
regie Hall Accordion Quartet. Programs as widely
“Bordertown Barbecue” and “Rendezvous with Ro-
Tonic Tunes” and “Siesta.”
plies its member stations with a constant stream of
latest in musical programming and our stations to
serve the local, regional and national advertiser
owed shows in as few or many markets as required.
ber—radio engineers and sound scientists term the
al-cut, Wide Range transcription the most nearly
in its entire field.
ake the next and really illuminating step—an audi-
est World station or World office? Ask to see the
ow shows. Pick one and let it speak for itself.

RATED MARKETS
“World Broadcasting System should
be given full credit for its continued
contributions toward increased fidelity
in the important field of electrical
transcriptions.”
—WQXR, New York City

—CKWX, Vancouver

“...the use of World has been largely
responsible for the popularity of our
station in this area.”
—WQAM, Miami

—WAMC, Rochester

AND WE’VE SOLD IT
to the World Library*

—ADVERTISERS’ BLUE BOOK

These stations enjoy exclusive local rights to the World Library—
most-repertoire of music ever recorded for radio—and
their audiences enjoy vastly superior reception because these
stations have installed the most sensitive and costly equip-
ment designed especially for broadcasting World recordings.
Advertisers planning spot campaigns will do well to consider
the influence and popularity of World Program Service stations.

—ASTING SYSTEM
BRANCHES AT SAN FRANCISCO AND WASHINGTON
ASCAP Rides Again

ASCAP didn’t do the unexpected. It’s still playing the broadcasters for suckers. It was that way in 1932 and again in 1935. The only difference is the over-all asking price, which increases by the size of a junior national debt each time. In ASCAP’s shell game all that’s necessary is to throw one industry group a chunk of red meat, sock the others and, when they are cut and bleeding, ride through the middle with skull and cross-bones aflutter. This may be indelicately expressed, but the fact is there is no other metaphor. This time the $50,000-$100,000, or less independent is the object of ASCAP’s flirtation, after having been per cented almost to extinction for nearly 10 years. Other stations, by virtue of the clearance at the source proposition, seemingly also would get concessions, with the networks—on paper—as the real fall guys. It’s smart baseball, if the ump isn’t looking.

Except for the smaller stations and for the networks, the ASCAP plan is strangely ambiguous. Who falls in what bracket seems open to negotiation—negotiations which will begin April 15, according to the command from Tin Pan Alley. And you get ‘em for 10 years this time if you take contracts while they’re hot.

What do we think? Well, up to now copyright history is repeating itself. In 1932 ASCAP proposed clearance at the source, with the networks to pay 5% on all their revenue. But it didn’t turn that way. To think that the networks will absorb the present 7½% on their gross income under the new ASCAP asking price is foolhardy. They can’t, and continue the same operating scale. Readjustment of compensation with affiliates sooner or later would be a foregone conclusion, if the present system of operation is to survive.

Let’s take a quick inventory. Assuming ASCAP’s success in melting the industry to the tune if proposes, it would mean an industry outgo of $7,500,000 to $10,000,000 a year for the use of ASCAP’s repertoire. ASCAP offers 10-year contracts. That means during the next decade the industry would shell out from $75,000,000 to $100,000,000 to ASCAP and its none-too-happy publishers for the right to help them sell sheet music and records and get radio, stage and other engagements.

Now what is to be lost by taking a little time to sleep on the ASCAP proposition? It can’t recant on the offer to the independents because it has admitted it has done them wrong for lo, these many years. Network affiliates, whatever their grievances with headquarters, can’t hope to win on all scores—not after the rude awakenings of 1932 and 1935. It seems rather idle to talk again about a united industry, after so many past splits, but that’s the only salvation.

As long as we can remember NAB conventions, broadcasters have resolved for a “pay-as-you-use” method of royalty, whatever the figure. A necessary part of such a plan is clearance at the source. ASCAP has blandly adopted the clearance provision, and dismisses the “per program” payments without even having discussed it with a representative industry group. It has excluded NAB from its conversations by the same snubbing tactics it employed in 1932 and 1935. Obviously, it means to negotiate individually with stations or small groups, if it can, because it fears the impact of a united industry. To us it seems clear that if the “per program” formula is to be attainted it can only be through a strong industry committee with the power to act for all.

In 1932 it was Oswald F. Schuette, then NAB copyright negotiator, who became the butt of ASCAP’s tormenting tactics, and kept it in its act of perpetual rage. In 1935 it was James W. Baldwin, NAB managing director. Now its NAB President Neville Miller, CBS Executive Vice-President Edward Klauber and Broadcast Music Inc. But there is a difference. The industry is stronger and wiser, and, if advance signs mean anything, it is willing to engage in a finish fight.

Nearly 300 broadcasters are in Broadcast Music Inc., making the third attempt to set up an industry music supply. ASCAP doesn’t like BMI. The derisive comments of Gene Buck indicate that. Which makes us feel that maybe BMI is the salvation after all.

We recall Warner Bros. pulling out of ASCAP in 1936 with about 25% of ASCAP’s popular catalog. We recall its return to the fold after the networks and many stations refrained from performing its music while a series of WB musical colossal flopped because the public hadn’t heard the numbers. The important ASCAP publishing houses are movie-dominated. ASCAP doesn’t care, despite its bleeding of radio, is a pittance to the Hollywood producers, who gauge their music as a by-product of the movies. They use it (and plug for radio performance) to attract box-office.

As we see the broad picture, the networks must give BMI everything they’ve got to break the ASCAP stranglehold. That may mean ASCAP music will not be named over the networks effective next Jan. 1. And that would mean a tobogganing of the popularity of ASCAP’s repertoire, for it is a truism that nothing is dearer than an unperformed tune. Will the motion picture music publishing subsidiaries be satisfied with that?

ASCAP has started out on a high-handed basis, repeating the past. It will wax more truculent as time marches on because that technique has worked before, and because it can wave that $250-per-infringement-law in the face of every broadcaster. It has already begun to abuse key individuals dealing for the broadcasters after refusing to negotiate with a copyrights committee of NAB. It’s the identical song and dance, with a few of the personalities changed, and the inevitably higher asking price.

However attractive the bait might be, we think it would be a serious mistake to flop at this stage. The composite industry has a fighting chance without ASCAP’s music. It would be a complete surrender to accept the untenable over-all terms. There’s just isn’t any reason for a stampede. Besides, who knows, Uncle Sam may yet see fit to do something about that be-whiskered anti-trust suit against ASCAP still on the books in New York.

‘Pulitzer’ Awards

THIS 20th year since modern broadcasting began its phenomenal rise to the forefront of social and cultural life, this annual award season seems a particularly appropriate time for recognition of a new sort. Unlike other arts and professions, radio has never been honored with awards for merit of the kind represented by the Pulitzer award for journalism and letters. Since radio in some of its important aspects is audible journalism, the move on the part of the University of Georgia, prompted largely by the veteran Lambdin Kay of WSB, is in the right direction.

The Pulitzer awards themselves also have a golden opportunity not only to prove that the breach between radio and the press has been healed entirely but to give proper recognition to audible journalism. Judged by a group of outstanding figures in professional and public life, these annual prizes are the most coveted in American journalism, literature and the theatre. Radio partakes of all three, and it would be a simple matter for the Pulitzer board to broaden its scope by including radio achievements for annual awards. The board meets this month, and so a particularly suitable time to announce that radio awards will begin next year. Old Joe Pulitzer, whose able son as a radio station owner has shown a keen appreciation of the importance of radio, would, we think, seize upon the opportunity.
EDWARD WILLIAM WOOD, Jr.

WHEN, last month, Edward William Wood Jr. moved his headquarters from Chicago's Tribune Tower to 1440 Broadway in Manhattan as the first incumbent of the sales managership of MBS, the story might have been titled "Return of the Native" or "Local Boy Makes Good". For Ed Wood is one of that seldom-met species, the born and bred New Yorker.

To get the vital statistics over with let's record here and now that Ed was born just 36 years ago, come next month. He attended New York's public grammar and high schools and New York U. In college he majored in Latin, with extra-curricular attention to dramatics and to various editorial jobs on the school publications. It was only after his graduation that a kind friend, deciding that Ed was now old enough, introduced him to the facts of advertising life, starting a romance that in 15 years has never missed a beat. On, to express it more prosaically, Ed's first job in advertising was in selling; he liked the field and he's still in it.

After a tryout with a trade paper in the export field, Ed in 1926 became New York advertising representative of the Chicago Tribune. For three years he sold advertisers on the idea that, since all Americans with enough money to buy anything had moved to Europe, the best way to secure their patronage was to advertise in the paper they read over there. Then came 1929. Something happened to the stock market; dividends disappeared; Americans in Europe came home; those who were already at home stayed here, and Ed was transferred to Chicago as a member of the 'trib's advertising staff.

In 1930 he left the paper to sell space for True Story magazine, but a couple of years later he returned to the Tribune fold as a salesman for the newspaper's radio station, WGN, Chicago. Late in 1932 Ed went back to New York to open and head a sales office there for the station. This venture proved so successful that in 1935 he was again transferred to Chicago, this time as sales manager of WGN.

In January, 1940, the Mutual Broadcasting System underwent a reorganization. In February, at the first meeting of the new board of directors, a decision was made to divide the duties of the general manager and to create an executive post, that of sales manager. The job called for a man of proven ability both as a salesman and as an executive, for a thorough knowledge of radio and for an intimate acquaintance with Mutual policies and procedure. Since WGN had been one of the founders and co-managers of MBS, the sales managership of that station was an obvious choice for the position and so, in mid-March, Ed Wood returned to New York.

Handsome, cheerful and friendly without carrying any of those barker's traits to objectionable extremes, Ed is a sociable sort of person who is inclined to spend more time in the offices of his clients than in his own, a fact that may explain his extra-successful sales record. The kind of a leader who actually leads his men in the field rather than directing them from a secluded office, Ed in his first week in New York had found no time to get settled in his new quarters, but had become instantly involved in a number of solicitations for new business for Mutual.

Married to the former Esther Edf of Winsted-Salem, Ed is the father of a boy, Edward William Wood Jr., who will be 5 in May. Though an enthusiastic golfer, Ed spends more time following sports, and whenever a major fight, meet, tournament or other athletic event is scheduled he can usually be spotted in a ringside seat.

JAMES PETRILLO, president of the Chicago Musicians Union and of the American Federation of Musicians, has returned to his home headquarters. Mr. Weber will remain on the West Coast for several weeks.

HERMAN BESS, executive vice-president in charge of local sales of WNEW, New York, has signed a five-year contract with the station to continue in that position and will hold the title of commercial manager. Irene Davis assistant to Mr. Bess was promoted to commercial traffic manager. Judy Dupuy, assistant to Richard B. Hard, WNEW publicity director, on April 8 Joins PM, daily New York newspaper, as assistant to John Manus, radio editor. Rhes Diamond, formerly assistant to Leonard Goldstein, publicity director of WMCA, New York, will take over Miss Dupuy's position.

WALTER DUNCAN, national sales manager of WNEW, New York, on February 1 was named vice-president of Wodaam Corporation, operator of the station, according to announcement by Mr. Duncan. Mr. Duncan, formerly of the CBS sales department, joined WNEW in 1937 as head of the national sales department and will continue in charge of that department.

C. W. CHATTERTON, formerly assistant business manager of the Portland Oregonian and director of its advertising department, has joined the business staff of the Chicago Herald-American. William Wood Weber, national sales manager, is of WABC, New York, has joined the CBS network as a supplementary market editor.

JERSEY AHERN, veteran radio executive, has been named general manager of the new KYU, Yuma, Ariz. which was inaugurated March 15 and joined the NBC network as a supplementary market.

ROY C. WITMER, CBS vice-president, in charge of sales, left New York March 26 for a trip to the Pacific Coast. He plans to stop in Chicago en route to return to New York within the next week.


F. A. BUTTERY, president of KFDF, and Al Hansen, general manager, after a month's sojourn in Phoenix, have returned to Great Falls, Mont.

R. C. LOCKMAN, CBS Hollywood account executive, is the father of a girl born March 15.

H. B. McNAUGHTON, former general manager of WTOP, Columbia, Md. died March 29, in Washington, D.C., in his 50th year.

EDWARD JANSEN, formerly promotion and production manager of KGLO, Minneapolis, has joined the sales staff of KSFO, San Francisco.

DR. GEORGE W. YOUNG, owner of WRSO and WFLA, West Palm Beach, Fla., has been appointed a member of the A u g H e l s Community Development Association, Inc., radio.

B. F. McCLEARY, NBC New York traffic manager, was in Denver during late March for conferences with Lloyd E. Koder, manager of KOA.

BROADCASTING • Broadcast Advertising

April 1, 1940 • Page 55
CLIFF JOHNSON, formerly program director of KFOR, Lincoln, has been transferred to KOIL, Omaha, as community program manager. Hugh Hughes, KOIL program director for the last year, has been named program production manager of the station, and Chuck Miller, formerly an- nouncer, has been shifted to KFOR as program director.

NEAL KEEIN, special events director, and Walt Lockem, sports commenta- tor, at Kansas City's KANS, were among 14 local business and pro- fessional men decorated by the Legion of Honor by the grand council of the Order of the Missouri, at its Grand Ball. The honor is conferred on former members of De- mocratic and Republican parties, civic leaders, or business leaders.

HARRY BRIGHT, formerly of WBLK, Clarksburg, W. Va., and David Siervers, new to radio, have joined the announcing staff of WGBR, Baraboo, Wis. Siervers has been named program director re- placing Bob Armstrong and Mrs. Darrell Early is now continuity di- rector.

JIMMY FARMER, vocal artist of WBLK, St. Petersburg, Fla., has been named musical director of the station, and will handle announcing as- signments.

RED FOLEY has returned to the staff of WLJ, Chicago, where he is narrator of the "Cumberland Edge Runners. During the war he was also signed to the NBC Awards Time pro- gram.

MRS. ELIZABETH FOY, assistant basketball, program manager of WGY, Schenectady, has resigned. She was preceded by Jeannette Swart. Robert Warner, of the guest relations staff, has been shifted to another assignment.

S. R. BAILEY, narrator on the "Beat the Band" program, has resigned. The father of a boy born May 15. Baby has been named Elmo Jr.

HELEN HALL has been promoted to the position of director of WAMT, Andover, S. C.

MAURICE HALL, announcer on WMCA, New York, has resigned. Mrs. Robert McGee, former-ly of WMCA, New York, has been named program director of the station.

DICK BRAX, sports caster of WSAI, Columbus, spent the last half of March in Tampa, Fla., with the training Cincinnati Reds, recording interviews and the first of the "Ready to Run" series for the Cincinnati Reds on the Sports Tral, interviewing ball players and giving accounts of activi- ties in all training camps.

ROBERT KIRK, announcer on WLW, Cincinnati, is heard from the training camp of the Cincinnati Reds on the Sports Tral, interviewing ball players and giving accounts of activi- ties in all training camps.

JACK COPELAND, CBS radio writer, has been named sports director of the Arizona Network, Phoenix, replacing the present sports director of the station.

GEORGE BECK, CBS radio writer, is the father of a girl born March 12.

JO ANNE YESTEN has been ap- pointed secretary to Lambert B. Ewen, general manager at the Philadelphia Record.

OSCAR LINN, formerly of WRAK, Lexington, Ky., and of WJZ, Philadelphia, has been appointed reliever announcer at KYW, Philadelphia, doing the "Million Dollar," rejuvenating from an operation.

BARBARA BRENT

STARTING little more than a year ago, Barbara Brent, at that time new to radio, has built up her program for WIP, Philadelphia, Dallas, until now it has four par- ticipating sponsors. As director of women's activities at WIP, she is on the air six mornings a week, talking about cooking, sewing, litera- ture, husbands and everything else under the sun interesting to feminine listeners, in addition to conducting interviews. Between broadcasts, she works on future programs and speaks before women's clubs and other groups, and enjoys her hobby, painting in oils. One of her paintings, "Black Cat at Night", was included in a recent exhibition that was held in a New York gallery. She makes her own greeting cards.

Wed War

Assignment of Thomas Grandin, CBS foreign cor- respondent, to cover the Bal- kan conference ended in the marriage of Grandin and Na- tali, the Make-up Artists, a 1939 movie for which he was nominated for an Academy Award.

Barbara Brent

MEREDITH WILSON, Hollywood musical director of the NBC Good News of 1948 program, sponsored by General Foods, has been signed for a new show, "Mamie in California," world premier on April 4 and 5, by the Los An- geles Symphony orchestra, under di- rection of the conductor. The program runs 37 minutes and represents four years of work by Wilson who is formerly NBC western division musi- cal director.

PHIL ALLEN, formerly of KFBB, Great Falls, Mont., has joined the announcing staff of KVI, Tacoma, Wash. James Doyle, formerly of the San Francisco station, has joined the KFBB continuity department.

CARL MARK, announcer of WHK- O, Cleveland, has been named special events director of the station. Robert Carter, formerly of WFMY, Greensboro, has joined the announcing staff of WCLE, announcing station, replacing Guy Wallace, resigned.


EDMUND ABBOTT, formerly of WCCO, Minneapolis, has joined the announcing staff of KSTP, Salt Lake City.

GRADY ANGLIN, formerly with KPDP, Pampa, Tex., has joined the announcing staff of KTOK, Oklahoma City.

HARRY SOKSNIK, Hollywood musical director of the NBC Grand Ole Opry and Playhouse series, sponsored by Andrew Jergens Co., (Woodbury soaps), has joined the announcing staff of WHQB, WBBM, Memphis, program director.

JOSEF TROTTER, Hollywood musical director of the NBC Kraft Music Hall program, sponsored by Kraft Foods, has joined the announcing staff of WBBM, Chicago, under the direction of Jim Maguire, writer of the series, has col- laborated in writing a new song, "You Are My Sunshine," which will be recorded by Bing Crosby, star of the weekly pro- gram.

SAMMY HARRIS, vaudeville booker, has joined WVO, New York, to manage the vaudeville and night club placements for the entertainment department of that sta- tion's artist bureau under Sydney Leipke.

MARY HEATON, formerly secretary to Robert Tucher, manager of WNA, Yankton, S. D., is now in the Chicago office of the United Press Association.

GENE ALLEN CARR and Wilson Northcross, both new to radio, are be- eing heard over KOIL, Oklahoma City, under the direction of Paul McMurtry, WHBQ, Memphis, program director.

EDGAR TIDWELL, chief announcer of KXK, San Antionio, KXK, has announced that that post and moved to Hollywood where he plans to free lance.

ARTHUR LODGE, Jr., senior at St. Thomas College and UP rewrite man at KSTP, St. Paul, has been chosen by radio writers across the country to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present a quarter-hour radio spot during the Conference to present
ART BROWN, Rue & Shine Man, of WOL, Washington, recently completed his seventh week of conducting four- daily broadcasts from the stage of Washington's Capitol Theatre setting a new record for bold-faced Frank Young, WOL, announcer-pianist-composer, recently completed his first pianistic composition, "The Masquerade Suite," which is scheduled for an early performance on MBS Army Band, conducted by Capt. Thomas F. Darcy, "Houseplay," and other Young composition, has been featured several times on Army Band broadcasts.

HARLEY HARRIS, formerly of KDFD, Amarillo, has joined KNOX, Wichita, Tex.

DAVID CLARK, continuity-production manager of KDFD, Amarillo, has sold a story to This Week magazine.

DOROTHY MERRICK, former receptionist at KYSM, Mankato, Minn., has been transferred to Cincinnati.

EL PROUGH, former Fargo, N.D., sports announcer, will handle Indianapolis baseball over WIRE this season.

LARRY HUBERT, KMO, Tacoma, publicist director, has been named by Manager Carl E. Raymond, as captain of the station's Tacoma commercial league golf team. KMO staff members include Hayden and Hubsy, Jerry Gerhman, Bert Dunn, and Roscoe Smith.

ED LINN, program director of KANT-KNO, Des Moines, is the father of a girl born March 19.

MARGARET LUTHER, of the continuity department of WBAP, Fort Worth, has been elected to the Business & Professional Women's Club of Fort Worth.

RUSSELL WILLY, formerly program director of WSAV, Savannah, Ga., has joined the announcing staff of WMBD, Peoria, Ill.

OSCAR LINN, formerly of WRAK, Cincinnati, Ohio, has joined KYW, Philadelphia, as assistant announcer.

ALAN CAMERON, Hollywood freelance writer, has joined the production staff of KBC, Beverly Hills, Calif.

AL STOODEN, member of the cast of the NBC radio serial "The New Adventures of Tarzan," has been transferred to the West Coast. His brother, Win, is substituting.

BILL ARMS, formerly of KATK, has joined KGKO, Fort Worth.

AL LEAHY, manager of CKBC, Toronto, is at Arvon Park, for a six-week period at the training camp of the Toronto Maple Leaf Ball Club.

NICK MARIANA, KGVO, Missoula, Mont., sports announcer, solicited as referee at the Montana State High School Basketball Tournament at Livingston, Mont.

MARTIN SMALL, has joined the announcing staff of KGVO, Missoula, Mont.

TED SHERMAN, NBC Hollywood producer, has returned to his duties after his assignment as co-writer of "Radio Cavalcade" at 20th Century-Fox Studios.

SAM HAYES, NBC Hollywood commentator on the live-weekly quarter-hour NBC Sperry Morning News, sponsored by Sperry Flour Co., has an announce role in the Universal film, "Alias the Deacon," which features Bob Burns. Hayes also is cast for a similar role in "Ski Patrol." to be produced by Universal Studios.

JOHN FRAZER, NBC Hollywood announcer, on the weekly Co- nutritional sponsored by Signal Oil Co., and Blanche Horton, non-professional, were to be married April 2.

FRED KNOX, formerly of WHLS, Fort Worth, Tex., has joined WMBC, Detroit, as programming director. Bill Rice, formerly of WHLS, has joined the WMBC announcing staff.

Linton to N. Y. Office

RAY LINTON, head of Ray Linton Broadcasting Co., on April 1 opened a New York office. Mr. Linton has moved his family from Chicago to New York, and will be in charge of the New York office for his clients and for their clients.

The firm recently signed Courtenay Savage, well-known writer and producer. Mr. Savage was formerly head of continuity of CBS, New York, and more recently wrote a number of daytime serials for General Mills and Procter & Gamble while with Blackett. Sample-Hummert, Chicago.

RONALD REAGAN, formerly announcer of WO, Des Moines, and now a Warner Bros. contract player, will play the role of George Gipp, Notre Dame football star, in the film, "Life of Knute Rockne".

Fibber, Lum and Abner

Are Signed for Movies

THE JORDANS, Jim and Marian, stars of the NBC Fibber McGee & Molly program, sponsored by S. C. Johnson & Son, wax, have closed a deal with Mel Shiner, Hollywood film producer, to make three pictures a year. The first will go into production in June when their weekly program goes off the air for the summer. Stories selected will be of the type similar to the stories used in the radio series. A new series of films, which would be under Shiner's production supervision, will be made in two years, in "This Way Please," at Paramount Studios.

Chester Lauck and Norris Goff have been signed by Voice Production, Hollywood, for a series of pictures to start in early April. Pictures will be based on their Lum & Abner program.

CONCENTRATE YOUR FIRE

On Indiana's "Bright Spot"

BOMBS do not fall on Indiana—but you can reach your sales objective with directness and power if you aim at the "bright spot" through WOWO. It's at the center of a rich Indiana market—with a liberal bonus coverage in Michigan and Ohio. Ask for folder now.

WESTINGHOUSE RADIO STATIONS, INC.

10,000 WATTS, 1140 Kc. NBC BASIC BLUE NETWORK
FREE & PETERS, INC., NATIONAL REPRESENTATIVES
Supreme Court
(Continued from page 12)

has any jurisdiction over FCC decisions denying assignments of licenses. This issue is raised in the appeals of both CBS and KSFO, San Francisco, from the Commission decision denying assignment of KSFO under lease to the network.

Justice Roberts, in reciting the court's opinion without referring to a single note, pointed out the lower court had held that the Commission had erred in failing to make findings on the economic issue and that, in the absence of such findings, the Commission's action in granting the Telegraph-Herald permit was arbitrary and capricious. The Supreme Court, however, concluded that economic injury to an existing station is not a separate and independent element to be taken into consideration by the Commission in determining whether it shall grant or withhold a license. Moreover, it held that the Commission's findings were adequate to sustain its grant.

The court handed down its opinion under four separate headings. Devoting the major portion of its ruling to the question of economic injury, it reiterated that such injury to a rival station is not in and of itself, and apart from considerations of public interest, an element the FCC must weigh and as to which it must make findings in passing on an application for a broadcast license.

Not Common Carriers

In contradistinction to communication by telephone and telegraph, which the Communications Act recognizes as a common carrier activity and regulates accordingly in analogy to the regulation of rail and other carriers by the ICC, the court said the Communications Act recognizes that broadcasters "are not common carriers and are not to be dealt with as such." Thus its opinion continued, the Act recognizes that the field of broadcasting is not one of competition. The regulations dealing with broadcasting demonstrates that Congress has not in its regulatory scheme "abandoned the value of free competition, as it has done in the case of railroads, in respect of which regulation involves the suppression of wasteful practices due to competition, the regulation of rates, and charges, and other measures which are unnecessary if free competition is to be permitted."

Holding that an important element of public interest affecting the issuance of a license is the ability of the licensee to render the best practicable service to the community, the court said the Act contemplates inquiry by the Commission into the applicant's financial qualifications to assure such ability. "But the Act does not essay to regulate the business of the licensee," the court held. "The Commission is given no supervisory control of the programs, of business management or of policy. In short, the broadcasting field is open to anyone, provided there is an available frequency over which he can broadcast without interference to others, if he shows his competency, the adequacy of his equipment and financial ability to make good use of the assigned channel."

"The policy of the Act is clear that no person is to have anything in the nature of a property right as a result of the granting of a license. Licenses are limited to a maximum of three years duration, may be revoked and need not be renewed. Thus the channels presently occupied remain free for a new assignment to another licensee in the interest of the listening public."

"Plainly it is not the purpose of the Act to protect a licensee against competition but to protect the public. Congress intended to leave competition in the business of broadcasting where it found it, to permit a licensee who was not interfering electrically with other broadcasters to survive or succumb according to his ability to make his.

JIMMIE ALLEN says: "I believe I can give you bigger sales increases per dollar spent than you can get by any other method. Let me prove it. I have 650 transcribed episodes (World transcribed) available. Proven merchandising plan. You can buy rights for any book—65 episodes per book. Write for price and information, stating number of episodes wanted, radio stations, etc. Audition record sent $4.00 C. O. D. Money back when returned."

RUSSELL G. COMER CO. 101 W. 11th St., Kansas City, Mo.
programs attractive to the public.

The court added this did not mean that the question of competition between a proposed station and an existing one is to be entirely disregarded, pointing out that the Commission’s practice shows it does not disregard the question. The court said it may have a vital and important bearing upon the ability of the applicant to serve the public and may indicate that both stations, the existing and the proposed, will go under, with the result that a portion of the listening public will be left without adequate service. It may also indicate that, by a division of the field, both stations will be compelled to render inadequate service.

No Power Over Rates

“These matters, however,” the court said, “are distinct from the consideration that, if a license be granted, competition between the licensee and any other existing station may cause economic loss to the latter. If such economic loss was a valid reason for refusing a license this would mean that the Commission’s function is to grant a monopoly in the field of broadcasting, a result which the Act itself expressly negatives, which Congress would not have contemplated without granting the Commission powers of control over the rates, programs, and other activities of the business of broadcasting.”

Taking up the second conclusion, Justice Roberts said it did not follow that, because the licensee of a station cannot resist the grant of a license to another on competitive grounds, he has no standing to appeal from an order of the Commission granting the application. Pointing out that the law provides for an appeal by an applicant for a license, or by another person aggrieved or whose interests are adversely affected, the court said Congress may have been of the opinion that one likely to be injured by the issue of a license would be the only person having a sufficient interest to bring to the attention of the appellate court errors of law in the action of the Commission.

“In this view, while the injury to such person would not be the subject of redress, that person might be the instrument, upon an appeal, of redressing an injury to the public service which would otherwise remain without remedy,” the court stated.

Right to Appeal

The court then held that WKBK had the requisite standing to appeal and to raise in the lower court any relevant question of law in respect to the order of the Commission.

On the third point, as to adequacy of the Commission’s findings, the court said its examination of them and of the grounds for decision disclosed they were sufficient “to comply with the requirements of the Act” in respect to public interest. In any event, it added that if the findings were not as detailed as might be desirable “the attack upon them is not that the public interest is not sufficiently protected but only that the financial interests of the respondent have not been considered.”

“We find no reason for abrogating the Commission’s order for lack of adequate findings,” the court stated.

On the fourth point, the court said that WKBK renewed a contentment made in the lower court that the Commission used as evidence and reports in its files without permitting it, as intervenor before the Commission, the opportunity of inspecting them. Declaring that the Commission disregarded the use of such material as evidence and that the Court of Appeals had found the disavowal “veracious and sufficient”, the court said it was not disposed to disturb that conclusion.

The court’s action, it was indicated, ends the litigation over the Dubuque controversy. Louis G. Caldwell, chief counsel for WKBK, declared thought would be given to a petition for reconsideration either in the lower court or the Supreme Court but that no determination had been reached.

THAT’S a $100 smile on the young man in the center. He’s Robert Lee Best of St. Louis, winner of the $100 first prize in the monkey-naming contest, sponsored nationally by Procter & Gamble, and broadcast on WKW. Robert T. Convey, president of WKW, watches A. J. McLaughlin, P & G, present check.

Boler Heads Group Seeking to Buy KRMC

JOHN BOLER, head of North Central Broadcasting System, a regional network centered in the Dakotas, Minnesota and Wisconsin, is president of a newly-formed company, Jamestown Broadcasting Co. Inc., which on March 18 applied to the FCC for authority to purchase KRMC, Jamestown, N. D., 250-watt outlet on 1370 kc. Purchase price would be $7,500. The purchasing corporation’s shareholders are Mr. Boler, 24 shares, president; David C. Shepard, 24 shares, vice-president; Howard S. Johnson, 24 shares, vice-president; Leonard J. McNeil, 24 shares, secretary-treasurer. All are from St. Paul, Messrs. Shepard and Johnson being interested with Boler in NCBS. In addition, Harland Ohde, of Jamestown, would own four shares. The station, which first went on the air April 1, 1937, would be purchased from a partnership of A. L. Roberts, R. B. McNab, A. J. Breitbach, hotel men.

BROADCASTING • Broadcast Advertising

April 1, 1940 • Page 59
Stop talking about that cow that jumped over the moon. You ought to see the territory I cover. —P. D. Averill
WHOLESALE UTILITIES, New York, on March 24 started a 22-week campaign for Federal Recording Radio, using five-minute one-hour programs 23 times weekly on WMCA, New York, 10 times weekly on WAAJ, Jersey City, and a weekly program with spot announcements on WSNV, New York. A large number of stations will be added throughout the year, according to Kliger Adv. Co., New York, the agency.

WARREN-NORGE Co., New York, for its electric refrigerators has been conducting for the past three weeks a weekly half-hour Jewish program on WJVD, New York, and on March 13 started a weekly, half-hour comedy program in Italian on WJVD. Account is handled direct, and campaign is for 13 weeks.

HAAS BARUCH & Co., Los Angeles (Moon Rose Soap), in a 13-week test campaign which started March 18, is using 15 spot announcements weekly on KHJ, that city. For its Iris Coffee, the firm is also using 30 spot announcements weekly on the station. For Lucky Strike cigarettes and American Tobacco Co., Beverly Hills, in its weekly "Happened in Hollywood" in March, the firm is using the services of Ben Weinberg, radio director of CBS program, who said "we can do business at this same stall. But the Boss decided I was just a natural born columnist. He spotted the dictionary—"

HERE IT is April Fool’s Day, or isn’t it, and no one is more fool than we. There’s a lot of business in the world and business is all that matters. And that Boss decided I was just a natural born columnist. He spotted the dictionary—it says that body of certain dimensions pressing vertically on its base. And just what have I been doing here at Standard, he asks, but sitting here, years on end, just pressing vertically on my base!

WELL, THE power of the press, you know—and here I am, the Little Tailor, permission and standing for the one and only Tailored Transcription Library Service, promoted to the dignity of typog-raphy and a legitimate publica-tion. While for years I’ve been broadcasting for Standard Radio just through the medium of pre-recorded tappable—TRANSCRIPTION TOPICS—a house organ that consistently proves the old axiom about a straight line being the shortest distance between your desk and a waste-paper basket.

BUT GETTING back to April Fool. In a recent library release we introduced under the forthcoming-cook-book-label, WINDSOR STRING QUARTET, a series of transcriptions which the hop-boys immediately sized up as more of this business of gearing up a Bach fugue to sound like Wash-boards, and just plain simple as nothing but simple. It was the Washboard Blues—all dressed up like a Bach fugue. And now even string-pops, even to Boogie Woogie, arranged and played superbly in chamber music style. Of course, the head man of the string four-was our Harry Blustone, who can get everything out of a violin but milk.

WASN’T IT Horace Greeley who said—when a dog bites, that’s just standard, but when you can make the cat spits bite on chamber music, THAT’S Standard Radio. And now, home, James, and let’s spare the plucks.

You are Transcriptions Up to Standard?

WHEN is April Fool’s Day, or isn’t it, and no one is more fool than we. There’s a lot of business in the world and business is all that matters. And that Boss decided I was just a natural born columnist. He spotted the dictionary—"

HERE IT is April Fool’s Day, or isn’t it, and no one is more fool than we. There’s a lot of business in the world and business is all that matters. And that Boss decided I was just a natural born columnist. He spotted the dictionary—it says that body of certain dimensions pressing vertically on its base. And just what have I been doing here at Standard, he asks, but sitting here, years on end, just pressing vertically on my base!

WELL, THE power of the press, you know—and here I am, the Little Tailor, permission and standing for the one and only Tailored Transcription Library Service, promoted to the dignity of typog-raphy and a legitimate publica-tion. While for years I’ve been broadcasting for Standard Radio just through the medium of pre-recorded tappable—TRANSCRIPTION TOPICS—a house organ that consistently proves the old axiom about a straight line being the shortest distance between your desk and a waste-paper basket.

BUT GETTING back to April Fool. In a recent library release we introduced under the forthcoming-cook-book-label, WINDSOR STRING QUARTET, a series of transcriptions which the hop-boys immediately sized up as more of this business of gearing up a Bach fugue to sound like Wash-boards, and just plain simple as nothing but simple. It was the Washboard Blues—all dressed up like a Bach fugue. And now even string-pops, even to Boogie Woogie, arranged and played superbly in chamber music style. Of course, the head man of the string four-was our Harry Blustone, who can get everything out of a violin but milk.

WASN’T IT Horace Greeley who said—when a dog bites, that’s just standard, but when you can make the cat spits bite on chamber music, THAT’S Standard Radio. And now, home, James, and let’s spare the plucks.

You are Transcriptions Up to Standard?

WHEN is April Fool’s Day, or isn’t it, and no one is more fool than we. There’s a lot of business in the world and business is all that matters. And that Boss decided I was just a natural born columnist. He spotted the dictionary—"

HERE IT is April Fool’s Day, or isn’t it, and no one is more fool than we. There’s a lot of business in the world and business is all that matters. And that Boss decided I was just a natural born columnist. He spotted the dictionary—it says that body of certain dimensions pressing vertically on its base. And just what have I been doing here at Standard, he asks, but sitting here, years on end, just pressing vertically on my base!

WELL, THE power of the press, you know—and here I am, the Little Tailor, permission and standing for the one and only Tailored Transcription Library Service, promoted to the dignity of typog-raphy and a legitimate publica-tion. While for years I’ve been broadcasting for Standard Radio just through the medium of pre-recorded tappable—TRANSCRIPTION TOPICS—a house organ that consistently proves the old axiom about a straight line being the shortest distance between your desk and a waste-paper basket.

BUT GETTING back to April Fool. In a recent library release we introduced under the forthcoming-cook-book-label, WINDSOR STRING QUARTET, a series of transcriptions which the hop-boys immediately sized up as more of this business of gearing up a Bach fugue to sound like Wash-boards, and just plain simple as nothing but simple. It was the Washboard Blues—all dressed up like a Bach fugue. And now even string-pops, even to Boogie Woogie, arranged and played superbly in chamber music style. Of course, the head man of the string four-was our Harry Blustone, who can get everything out of a violin but milk.

WASN’T IT Horace Greeley who said—when a dog bites, that’s just standard, but when you can make the cat spits bite on chamber music, THAT’S Standard Radio. And now, home, James, and let’s spare the plucks.

You are Transcriptions Up to Standard?
AUTO SETS FAVORED
Portland Paper Editorializes
— On Advantages

TO A READER'S contention that auto radios cause traffic accidents, the Portland Oregonian in its March 20 issue came out editorially on behalf of car owners and their benefits. Auto radios contribute to safety, the Oregonian contends, by keeping drivers' eyes on the road instead of wandering around the landscape. They tend to prevent day-dreaming and serve as an antidote for boredom. Reference is made to safety programs during traffic peaks and to warnings of sudden road hazards. Traffic safety groups, the Oregonian adds, testify to the value of auto radios in getting warnings to motorists and in generally helping safety campaigns.

OLD DOBIN IS RETIRED WITH HONOR!

Obediah’s gone and got himself a gas-buggy! In fact, most of our prosperous hayseeds have! For the record, our Red River Valley listeners account for 46.8% of all automotive sales in North Dakota, South Dakota and Minnesota (omitting the counties containing St. Paul and Minneapolis).

Every bit of this “spending!” is done within range of WDAY, the only N. B. C. chain station for 190 miles around Fargo. Why not let us take YOUR message to this ready market?

WDAY, INC.
N. B. C.
Affiliated with the Fargo Forum
FREE and PETERS, INC.
NATIONAL REPRESENTATIVES

FARGO N. D.
940 KILOCYCLES
5000 WATTS DAY
1000 WATTS NIGHT

Court Decision
(Continued from page 12)

broadcasters to survive or succumb according to his ability to make his programs attractive to the public.

This is not to say that the question of competition between a proposed station and one already operating under an existing license is to be entirely disregarded by the Commission, and, in deed, the Commission’s practice shows that it does not regard that question as entirely without vital and important bearing upon the ability of the applicant to successfully serve the public; it may indicate that both stations, the existing and the proposed — perhaps, with the result that a portion of the listening public will be compelled to pay two rates for adequate service. It may indicate that, by a division of the field, both stations will be compelled to pay two rates for adequate service.

These matters, however, are distinct from the consideration that, if a license is granted, the licensee and any other existing station would be asked to accept an economic loss to the latter. If such economic loss were a valid reason for refusing a license this would mean that the Commission’s function is to grant a monopoly in the field of broadcasting, a result which the Act itself expressly negates. If Congress would not have contemplated without granting the Commission powers of control over the rates, programs, and activities of the business of broadcasting, we conclude that economic injury to an existing station is not a sufficient and independent element to be taken into consideration by the Commission in determining whether it shall grant or withhold a license.

Right of Appeal

Second. It does not follow that, because the license of a station cannot resist the grant of a license to another, on the ground that the resulting competition may be an economic injury to him, he has no standing to appeal from an order of the Commission granting the application.

§ 402(b) of the Act provides for an appeal to the Court of Appeals of the District of Columbia (1) by an applicant for a license or permit, or (2) by any other person aggrieved or whose interests are adversely affected by any decision of the Commission granting or refusing any such application.

The petitioner insists that as economic injury to the respondent was not before the Commission, it is impossible that § 402(b) was intended to give the respondent standing to appeal to the Court of Appeals. This view overlooks the significance of § 401(b), which states that anyone aggrieved by any decision of the Commission granting or refusing any such application may appeal to the Court of Appeals.

Costs shall be reasonable in enrolling § 402(b)(1)(2). It may have been of opinion that one likely to be injured by the issue of a license would be the only person having a sufficient interest to bring to the attention of the appellate court errors of law in the action of the Commission in granting the license. In this view, while the injury to such person would not be the subject of redress, that person might be the instrument, upon an appeal, of redressing an injury to the public service which would otherwise remain without remedy. It is within the power of Congress to confer such standing to persons aggrieved.

We hold, therefore, that the respondent had the requisite standing to appeal to and raise, in the court below, any relevant question of law in respect of the part of the Commission's orders.

Third. Examination of the findings and grounds of decision set forth in the Commission discloses that the findings were sufficient to comply with the requirements of the Act in respect of the public interest, convenience, or necessity involved in the issue of the permit. In any event, if the findings were not as detailed upon this subject as might be desirable, the attack upon them is not that the public interest is not sufficiently protected but only that the financial interests of the respond-
Discs Offered Stations By Children's Campaign

A SERIES of WBS transcriptions carrying talks by leading literary and public figures has been submitted to broadcast stations as part of the Children's Crusade for Children, which will stage a campaign April 22-30 on behalf of child victims of the world crisis. The Crusade is designed to raise funds from American school children, who will be asked to donate as many pennies as they are years old, or anything down to a cent.

No direct money appeals will be made on the discs, which are designed to explain the purpose of the Crusade, and children will not be asked to send pennies to stations. Among those behind the Crusade are Mrs. Eleanor Roosevelt, Dorothy Canfield Fisher, Mrs. John A. Ryan, William Allen White, Dr. Charles B. Glenn. Wide support to the movement has been given by publications and by civic and educational organizations.

CBS Recording Appoints

WILLIAM T. MEYERS, former-ly of Earl J. Goette Corp., Kansas City, has been appointed executive consultant on chain-store and sales policies of Columbia Recording Corp., Bridgeport, according to Edward Wallerstein, president. Mr. Meyers attended Purdue U where he studied chemical engineering. After graduation he joined RCA in Chicago, where he re-aged 12 years, becoming general manager. His duties, cooperating with H. S. Maranis, assistant to the president of Columbia Records, and Paul E. Southard, sales manager of the company, will deal with the increased importance of record sales in chain stores.

THE Duncan Sisters, Vivian and Ros-sell, famed as "Topsy and Eva" recently filed articles of incorporation at Sacramento, Cal., as "Duncan Sisters Inc." stating they plan to produce recordings, plays, motion pictures and radio features. The first radio production will be a series of Stream-lined Fairytales.

Mertens and Price Split; Big Florshamp Campaign

FRED C. MERTENS has sold his interest in the Los Angeles transcription firm of Mertens & Price, to George Logan Price, co-founder of the business, who will carry on as George Logan Price Inc., with offices at 3902 W 6th St., that city. Mr. Mertens has organized his own production unit under the firm name of Fred C. Mertens & Associates, with headquarters at 3923 W. Sixth St. He is now producing a re-creation of famous ring battles of the last century which will be sponsored on a group of sta-tions nationally by Florshamp Shoe Co., Chicago. Titled The Squares Circle, the series features James J. Jeffries, ex-world champion heavyweight.

George Logan Price Inc., will carry on with transcribed shows which Mertens & Price has de-gloved since 1934. They include The Sunday Players, Wade Lane's Home Folks, Martha Lane's Kitchen and Leisure House.
New Studios and Offices Are Planned by WFAA

WFAA, Dallas, will soon start construction of new studios on the tenth floor of the Santa Fe Bldg., according to a recent announcement by G. B. Dealey of the Dallas News, operating the station. Work is to be completed about Sept. 1.

Plans for the new studios, drawn by NBC engineers and George Dahl, of Dallas, in cooperation with Ray Collins, WFAA technical supervisor, call for five studios, one an auditorium seating 300. Large music library, artist lounge, recording studios, audition room, and master control room are included. Offices will be on a higher level.

Since 1928 WFAA studios have been housed in the Baker Hotel.

THE LARGEST TRADING AREA BETWEEN BALTIMORE AND ATLANTA

WPTF
RALEIGH, N. C.
680 Kilocycles — 5000 Watts

With 1,055,000 population centering its trade in Raleigh, North Carolina's State Capital takes first rank in the fast developing new South. *** This trading area was defined by B.B.D.&C., the figures come from Sales Management. WPTF, in a study for you confirming all the facts, *** Big as our trading area is, WPTF coverage is much greater, for 5000 watts on 680 KC with fine engineering equipment provide the best signal with NBC Red and Blue programs over a wide area. *** Do these facts suggest why WPTF carries one of the highest percentages of national spot in the nation?

FREE & PETERS, Inc. National Representatives
Chicago — New York — Detroit
San Francisco — Los Angeles — Atlanta

New Sales Tricks
(Continued from page 44)
extra garments or articles for his wardrobe, by influencing the consumer's subconscious mind toward this color, so when it was presented to him over the counter it was not new, radical or strange, but whose acceptance was partially insured by this previous publicity.

Actual Results
After 18 months on the air, we have come to the following conclusions resulting from our radio experience:
1. The single foremost effect of radio for retail advertising is principally cumulative. Although we have every evidence that immediate results exist in a substantial way, we find that the greatest net results are cumulative. The cumulative effect of our entire program over a period of 18 months has grown larger as our time has lengthened.

2. The trading area which radio reaches coincides with the majority of our territory, but in addition it exceeds the radius of newspaper coverage and the net results from the contiguous territory are not as great from radio as from newspapers. Mail orders are more frequent and in greater volume from newspapers than from radio in the same density of coverage. But the number in volume have been definitely increased by radio, the total results being greater than from newspapers alone.

3. Radio is the best "publicity" medium for a retail store, replacing billboards and other types of institutional mediums.

4. Radio has increased the density of our accounts in our trading area.

5. Radio has pyramided our stock of goodwill in institutional value in our contiguous territory.

In conclusion, radio offers the retail merchant an additional medium to augment other methods of distribution. It provides the retailer with the opportunity to send the personality of the spoken word over the air lines to amplify the printed word in a substantial way. Radio orients the miracle of the second sense to the consumer in merchandising your products. Radio, if used wisely, will help build better business.

Millions in Time Given Educators

Industry Praised for Aid to Federal Radio Activities

VOLUNTARY cooperation by the broadcasting industry with the U. S. Office of Education has provided $3,500,000 worth of free radio time in four years, J. Clark Waldron, supervisor of station relations for the Office declared March 14 in a talk before the South Carolina Education Assn. at Greenville.

In its radio activity the Office enjoys the facilities of 260 network stations and many independents, he said, with some of its network programs being heard on hookups of 70 to 100 stations, he said.

Through its Educational Radio Script Exchange, the Office in four years has distributed almost 250,000 scripts. In March 1,200 volumes of scripts were in circulation and the Exchange has just published its fourth edition catalogue listing some 3,000 scripts. A radio glossary, a manual and recordings of the Americans All-Immigrants All series also are distributed by this extension service.

Scripts Circulated

Scripts are available, he said, to qualified groups interested in educational radio. They not only promote education, but are non-partisan and based on careful research. Emotional factors, he continued, are not over-emphasized and the listener is free to form his own opinions.

An audience service section is maintained, according to Mr. Waldron. Through this section educational groups, superintendents, principals, teachers and listeners may obtain printed matter, radio lists and study guides supplementing Office programs. Nearly a million letters have been received from listeners.

Dramatic broadcasts are featured, since lists have been found to prefer educational programs with a high entertainment content. Talks are included only as incidental material. The Office believes its activity is a logical development of the American system of broadcasting, Mr. Waldron declared, "under which we will reach the apex of efficiency, democratically, in contrast to the rigid controls which have been fastened upon radio in almost every other part of the world."
Promotion Events

SPECIAL periods of promotional efforts for retailers during April include: National Baseball Week, March 30-April 6; America's Home, April 6-13; Foot Health Week, April 15-20; National Notion Week, April 22-27; National Hardware Week, April 25-May 4; National Fisherman's Week, April 27-May 4; Better Homes Week, April 28-May 4.

Licensed But Silent

SILENT since Oct. 24, 1938, KGCA, Decatur, Ill., has been granted another extension of special temporary authority from March 19 to April 17 by the FRC, but final action on its license is expected shortly. The station is assigned to 1310 kc. with 100 watts daytime only, sharing time with WKLW, the local Luther College non-commercial station. It is understandable that Charles Walter Greenley, nominal licensee of KGCA, is seeking arrangements with the college to take over his station's time through possible merger of the stations.

PEPSODENT grins are registered by this trio of Omaha sportscasters during a special broadcast on WOW welcoming Tom Daily (center) to the city and station. Hugh Higgins (left), of KOIL, and Ronnie Ashburn, of KOWH, both spoke during the special program, illustrating the friendliness of competition. Daily will handle a nightly sports summary on WOW under a contract with Palstaff Breweries, sponsor also of Parade of Progress on WOW and Musico on KOIL.

KWTO - KGBX Chicago Office Headed by Pearson

KWTO and KGBX, Springfield, Mo., announce opening of new station representative offices in Chicago, headed by John E. Pearson, for eight years associated with the stations. Offices will be at 360 N. Michigan Ave., telephone Franklin 2360. Mr. Pearson, whose title will be national accounts manager, will have complete charge of all national spot business.

Personal shifts at the Springfield stations include that of Russ Davis, formerly chief announcer, to production manager of national business; Gordon Wardell, formerly sales manager of KGBX, is now sales manager of both stations; Leslie Kennon is now in charge of merchandising and promotion.

Bob Hope Show on Tour

PEPSODENT Co., Chicago (toothpaste), in late May will send its weekly NBC Bob Hope Show on a personal appearance tour. After broadcasting from Chicago May 21, the troupe will go to White Sulphur Springs, Va., and entertain convention delegates of the National Wholesale Druggists Association, May 25-29. The program will emanate from New York May 28 and June 4. An intensive publicity campaign is planned for the tour. Agency is Lord & Thomas, Chicago.

According to the latest CAR report, the AAR-Basket program, sponsored on CBS by Colgate-Palmolive-Peet Co., has a 40.6 rating or a larger listening audience than any of the ten other half-hour quiz programs now on the air. The program, conducted by Jim McWilliam, has been on CBS for Colgate since October 5, 1938, Benton & Bowles, New York, is the agency.

Three noteds news commentators have been selected for special honor by the New York State Board of the Women's International League for Peace and Freedom, which recently adopted the following resolution, "Whereas, among commentators on the European war, Elmer Davis of CBS, Raymond Gram Swing of MBS and Quincy Howe of WQXR, New York, are notable for fair and objective presentation of the news."

Powerful Summer Sales Stimulant

With Listener Preference

KSD has led with "Firsts" in nationwide Star Popularity Polls since 1935, assuring listener preference in St. Louis.

With Greater Daytime Coverage

KSD has a greater daytime population coverage area than any other St Louis broadcasting station.

NBC RED NETWORK
A transcribed syndicated serial with a new twist! Designed for presentation to the feminine audience. Particularly suitable for furniture and department stores—loaded with merchandising possibilities. Also adaptable for food products or any advertiser whose appeal is to the housewife and family.

Write or Wire for Audition Samples
KASPER - GORDON, Inc.
140 BOYLSTON ST. BOSTON, MASS.
WILLIAM N. BERECH, formerly in the research department of J. Walter Thompson Co., New York, has been appointed research manager of Lyon Baker Co., New York. John D. Burke, formerly of Lord & Thomas, New York, also has joined the research staff of the Baker agency.

DON BASSETT, formerly promotion manager of Northern Broadcasting & Publishing Ltd., Timmins, Ont., has joined James Fisher Co., Toronto agency, as radio executive.

GEORGE KERN of Blockett-Sample-Illumner, New York, is temporarily assisting Lester Schroeder director of media, for the agency, and will take over Mr. Schroeder's position upon his resignation later this month.

WARREN E. KRAFT, vice-president and manager of Erwin, Wasey & Co., Seattle, was recently appointed chairman of the Seattle Chamber of Commerce tourist committee. He is also a member of the Chamber's board of trustees.

LEBOY A. KLINING, formerly vice-president in charge of the Chicago office of Cecil & Flesher, has opened offices at 225 N. LaSalle St., Chicago; telephone, Franklin 1906.

JOHN D. SIMON has joined the Portland, Ore., office of Botsford, Constantine & Gardner, as an executive and copywriter on March 15. He formerly headed his own agency in that city.

CARYL COLEMAN, radio director of Botsford, Constantine & Gardner, San Francisco is also acting as radio producer, writer and counsellor to various agencies on a free-lance basis.

PACIFIC MARKET BUILDERS, Los Angeles, has moved to larger office at 672 S. Lafayette Park Place.

HARMON BUTLER Adv. Agency, San Francisco, has moved to the 19th floor of Central Tower.

New Research Group

THE George S. May Business Foundation, a non-profit organization to carry on research work in the interests of private business, has been formed with offices in Chicago and New York, according to an announcement by George S. May, Chicago business man. With research engineers in 18 leading cities, the Foundation plans early studies of modern market analysis methods, the effect of public opinion on business, bonus payment plans for supervisors and executives and the value of trade associations to business. The organization, supported by contributions from members of its constituent associations, has established a research office in Chicago.

FLEMMING-HALL, New York, to Weis & Geller, New York, for Maplen cigarettes and tobaccos. Spot radio will be used after April 15, but details are not yet set.

COLLEGE INN FOOD PRODUCTS Co., Chicago, to Weis & Geller, Chicago.

FLEMING-HALL Co., Los Angeles (air division), to John M. Allen Agency, newly established at 1708 W. 8th St., Los Angeles.

W. H. ALPEN Labs., Chicago, nail (hair dressing) to Grant Adv. agency, same city. Radio is planned for the fall, according to K. R. Bennett, account executive.

ZION KOSHER MEAT PRODUCTS, New York, to Jack Yarmey & Co., New York to promote contest, March 18 through April 28, to name skinless frankfurter. Daily spot announcements on WEVD, New York, with more radio planned for contest.

J. C. ENSO Ltd., United States and Canada, to Atherton & Curtler, New York, for all advertising on Eno effervescent salts.


INTERNATIONAL SALT Co., Scranton (buoy salts), to J. M. Mathies Inc., New York (domestic salt package division only).


UP Expands Radio Services

UNITED PRESS has opened a news bureau in Charleston, W. Va., under the management of David Dalton, formerly in the UP Cincinnati office. Radio departments of the UP Albany, Hartford and Washington offices have been expanded, and Cornelius O'Day has been transferred from the radio division in New York to Washington. New subscribers to UP news are WSFD, Toledo; KTOH, Lithue, Hawaii; KGBU, Ketchikan, Alaska; KWAL, Wallace, Idaho; WMDO, Brunswick, Ga.; WHBU, Anderson, Ind.; KFND, Windsor, Mass.; WTRY, Troy, N. Y.; KORN, Fremont, Neb.; KIOA, Clives, N. M.; KBRR, Baker, Ore.; WEOF, Sumter, S. C.; KWAT, Watertown, S. D.; KGKB, Tyler, Tex.; WBHI, Roanoke, Va.; WLOG, Logan, W. Va.; WBHP, Huntsville, Ala.

ADVERTISING Federation of Portland, Ore., recently held a series of weekly media meetings. The series opened with Radio Day. This was followed by Newspaper Day, Electrical Advertising Day, Photographers' Day and Magazine Day.

Rand McNally find Youngstown one of the 16 places in the U. S. where business owes greatest gains over 39. For your Ohio paign you need FMJ on the Blue Network)

Advertising

April 1, 1940 • Page 67
Engineers to Consider Recent Video Progress

THOMAS F. JOYCE, vice-president and advertising director of RCA Mfg. Co., Camden, will deliver the keynote address on "The General Outlook for Television" at the opening day's session of the Society of Motion Picture Engineers' annual spring convention at Hotel Haddon Hall, Atlantic City, April 22-25. In addition to the technical papers on every phase of the motion picture art, the following television papers have been scheduled:


THE NEWLY incorporated Television Engineers Institute of America, Hollywood, has tentatively set June 19 to 22 inclusive as dates for an international television convention to be held in the Roosevelt Hotel, that city. George H. Seward, president, and Arthur A. Stern, secretary-treasurer, are in charge of arrangements.

Don Lee Speeding Plans For New Video Station

WITH all legal obstacles cleared, Don Lee Broadcasting System, Los Angeles, is speeding up plans to erect and operate a television station on Mt. Lee, 1,700 feet above Hollywood. Blueprints have been approved, and it is expected that work will start immediately. Thomas S. Lee, president of the organization, proposes to build studios and facilities at a cost of more than $200,000, and move the Don Lee telecaster W6XAO from downtown Los Angeles to the new site. He plans to have it in operation by Sept. 1.

The FCC recently approved removal of downtown Los Angeles and also assigned the transmitter to a new channel. Los Angeles City Council and Planning Commission has sanctioned the move. Road work to the new site is now under way and will be finished by early April. Don Lee has also made application to initiate experiments in frequency modulation. If granted, it is planned to install the transmitter and antenna in a special building on Mt. Lee.

Porter Named by AFRA As Field Representative

JAMES PORTER, who has a background of several ten years in union organizing and negotiations, has been named the field representative of the American Federation of Radio Artists. Although Porter has no previous radio experience, AFRA executives felt he was more than outweighed by his history in other labor fields. Following a week in Charlotte, N. C., he is going to Detroit on April 1, where he will establish temporary quarters for organizing activities in that area.

A contract for staff announcers at KDO, Denver, has been negotiated by Vic Conners of the union's San Francisco office as the first step in a drive to sign all Denver stations before the AFRA convention, to be held there in August. Contract, which follows the standard form set up by AFRA and the networks for M. and O. stations, calls for immediate raises for announcers. Station is the fourth NBC owned and operated outlet to sign with AFRA in the past two weeks, others being WBZ, WRZA, Springfield-Boston, and WMAL and WRC, Washington. AFRA transcription code is still in effect.

In Syracuse

WFBL Is the Station

REASON 1 FULL basic Columbia programs—a greater continuous listening audience.

REASON 2 FAVORITE of listeners—more network programs, more short wave broadcasts, more national and local features.

REASON 3 FAVORITE among advertisers—proved by heaviest schedule in history—95% of time sold.

WRITE for full details

ONONDAGA RADIO BROADCASTING CORP.
Syracuse, New York
MEMBER BASIC "NETWORK" COLUMBIA BROADCASTING SYSTEM
National Representatives, Free & Peters, Inc.
When one of the world's largest refiners of industrial naphthas began to expand the marketing of a branded gasoline through independent Oklahoma jobbers it selected WKY to merchandise that gasoline to consumers. Gallonage increased immediately. The number of jobbing accounts mounted. But of even greater importance was the effectiveness of WKY in bringing about a closer relationship between the company and its jobbers and their dealers. WKY planned and produced the program responsible for this merchandising success. Through a seven-piece string orchestra with vocalists, this show offers fifteen minutes, five days a week, of the kind of popular music WKY's statewide listening audience goes for in a big way.
He's thinking about a 350 yard drive; about an arching mashie shot that hits the flag; about a stymied putt. He's thinking golf.

And what's he thinking when he reads BROADCASTING? He's thinking radio.

BROADCASTING means radio advertising. It's 100% radio all the time. Its 8,000 circulation blankets your prospects. You know you're reaching the right people when you sell your story through BROADCASTING.

They're Radio-Minded when they read BROADCASTING
SPONTANEOUS was the tribute paid by listeners to Sportscaster Art Bramhall, of WHBL, Sheboygan, Wis., in his descriptions of the home games of the Sheboygan Redskins, up among the leaders in the National Professional Basketball League. Confessing as a complete surprise, WHBL listeners suddenly popped up during one of the games broadcast with $52 to buy a Sportscaster Bramhall a watch.

Small Loan Radio Ban Proposed in New Jersey

A BILL asking $25,000 for the State attorney general to finance a campaign against radio broadcasts of small loan companies was introduced in the New Jersey State Assembly in March by Peter A. Artaserse, Democratic assemblyman. The measure would authorize the attorney general to employ investigators, commentators, and lecturers and to use any radio station in the State in an attempt to counteract radio advertising which might be construed to be against public interest.

"The purpose of this bill," commented Mr. Artaserse, "is to expose the vicious practices of the small loan racketeers in soliciting loans by the use of radio." In a companion statement he added, "Every type of rosy picture is presented to make it attractive to people to run themselves into debt. Nothing, however, is ever said about the interest they have to pay; nothing is said about the facts that they have to pledge their furnishing as collateral; nothing is said about putting up life insurance policies and mortgaging their securities for these loans." It was the State's duty to protect the people, he declared. Several Assembly members have introduced bills to cut from 2½% to 1½% the monthly interest rate on small loans.

Miss Hackett to KROW

ELMA LATTIS HACKETT, after three years on KSFO, San Francisco, has moved her Friendly Homemaker program to KROW, Oakland, managed by Philip G. Laskey, former KSFO manager. Currently on KROW she has the Morning Mystery Quiz sponsored by Miller Packing Co. Mr. Laskey announced he plans to build an elaborately equipped electric kitchen for Miss Hackett, who is a graduate in home economics of the U of California and U of Oregon. She will continue her lecture work under the auspices of KROW. She was succeeded at KSFO by Ethel Hawes, formerly of Cleveland.

Tries All Three

BILL PENNELL, announcer of WIOD, Miami, claims the distinction of having worked on all the major networks within a period of two months. While they were keyed from Miami, the Walter Winchell and Milton Berle programs on NBC, Ripley's program on CBS and the Hallelujah Park races on MBS were all handled by Pennell. Incidentally, Winchell on the Jergens Journal made the first announcement of Pennell's engagement to Margaret McFarland of Atlanta, whom he will wed in the spring.

Illicit Operator Fined

FOR conviction on charges of operating an unlicensed radio station and operating a station without an operator's license, Russell Callender, of Dallas, was fined $52 on each of the two counts by the U. S. District Court, St. Paul. The violations were uncovered by FCC inspectors.
GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.

GE Edison Films

NINE REELS of film and a recording of the inventor's voice made in Schenectady during his life have been loaned to Metro-Goldwyn-Mayer by General Electric Co. to help make the movie of the life of Thomas Edison.

The movie is being released in two parts, the first already released with Mickey Rooney as star and the second part, for which GE is furnishing not only the films but other data, to star Spencer Tracy.

RCA announces an ultra-high frequency antenna MI-782-A fabricated at the factory for specified operating frequency and requiring no adjustment after installation.

WOXY, the FM adjunct of WOBC, Duluth, which went on the air March 15, is utilizing General Electric equipment and not a WE transmitter, as erroneously reported on page 30 of the March 15 Broadcasting.
This new, moderately priced Presto Model F recorder makes the perfect installation for broadcasting stations, colleges, advertising agencies and personal recording studios. It records continuously, without interruption, on records up to the 17½” master size and also re-records from one record to another. The quality of the recordings made on the model F recorder makes them suitable for use by any broadcasting station.

Note these operating conveniences:

- The exclusive Presto rubber-rimmed turntable driven directly by a steel pulley on the motor shaft, a drive system that eliminates idler wheels, belts, gears and other parts subject to rapid wear. Speed shifter lever changes instantly from 78 to 33½ R.P.M.
- Tables are equipped with the Presto 1-C high fidelity cutting head which records uniformly a range from 50 to 8,000 cycles and completely modulates the groove at a pitch of 112 lines per inch.
- A vertical damper eliminates vertical modulation in the groove and prevents rapid changes in groove depth due to surface irregularities in the disc.
- A time scale on the cutting arm allows the correct starting point for all sizes of discs and elapsed recording time at both 78 and 33½ R.P.M.
- Amplifier gain 15 DB, output 10 watts. Amplifier controls include a two microphone mixer, playback gain control, combination control which increases the high frequency response for 33½ R.P.M. recording and attenuates the high frequencies when playing commercial records, low frequency equalizer and a switch for changing instantaneously between cutters for continuous recording or re-recording.
- The complete equipment mounts in a wood case (Length, 67”-Depth, 21”-Height, 49”) attractively finished in two tones of gray with silver trim. Height of turntable above floor level, 32”.

For descriptive folder and price quotations, write:

PRESTO RECORDING CORPORATION
242 West 55th St., New York, N.Y.
In the Army

TROOP personnel from Fort Benning, center of peace time concentration of soldiers, provides the talent for the Army Hour broadcast over WRBL, Columbus, Ga., Saturday night. The half-hour variety show, originating in the new Army YMCA in Columbus, is sponsored jointly by the YMCA and WRBL. Inaugural broadcast March 16 featured talks by Manager J. W. Woodruff, mayor of Columbus and army officers.

Decision by Public

EXPRESSION of public opinion on matters of current interest place in Washington the previous week. Quarter-hour shows are heard at 4:45 p.m.

From the Capital

WAAF, Chicago, has inaugurated new series of Sunday features titled Under the Capitol Dome which consists of a resume of the important developments which took place in Washington the previous week. Quarter-hour shows are heard at 4:45 p.m.

Faithful 600,000 Coverage

The 600,000 folks in the “Pearsites” depend on WMWD to bring them strong, tasteful quality reception of programs heard through each day—told in leading Columbia network features. The loyal WMWD following is evident in the fact that they are well satisfied.

More than 250 progressive Central Illinois retailers depend on WMWD for strong coverage of their respective marketing areas. They are getting it—why shouldn’t we?

Be sure you include on your National list this capable coverage of the rich concentrated “Pearsites”. Spending is natural and you are bound to get more for your money.

National Representatives
Free and Peters, Inc.
Welfare and Golf
JUNIOR LEAGUE members of Greater Cleveland are participating in a weekly program on WGAR, Junior League Radio Workshop, presenting in dramatized form the functions of the various welfare agencies. Scripts are prepared by League members and supervised by Wayne Mack, WGAR drama director. Golf hints by leading local "pros", top scores of the week, recognition of "hole-in-one" players and soothing music will comprise The 18th Hole on WGAR, Cleveland, beginning in May and extending into September. The idea was developed and will be produced by Maudie Condon and Dave Baylor of the WGAR staff.

Freaks of Sports
NEW daily feature, Quirks in Sports, carried as part of Morey Owens daily Sports Review on WROK, Rockford, Ill., spots the yarns of a well-known sport official—kept anonymous except for calling him "referee"—who has made a hobby of collecting stories of usual happenings in sporting events. Owens rewrites these tales of freaks played to non-sporting audiences as highlights on his sports show.

Edgar Allen Poe Dramas
KECA, Los Angeles, has started a new weekly half-hour series of dramatized stories by Edgar Allen Poe. Titled, Once Upon a Midnight, the series is adapted for radio by Forrest Barnes, Hollywood writer. Glen Heisch, program manager of KECA produces the series which features Ted Osborn as Poe. Claude Sweeten's orchestra provides incidental background music.

Art and Antiques
NEW program, The American Treasure Chest, recently made its bow on KPO, San Francisco. Don Thompson, m.c. takes art objects, curios, antiques, etc., and asks studio guests to identify them and give information, history and anecdotes. Thompson then tells the complete story of the object, sent in by listeners, comparing the information of the experts in the studio to the actual facts surrounding the Americaa concerned.

News From the Counter
INTERVIEWING customers, salesladies and department heads is the formula of Household Quiz, weekly half-hour show on KGKO, Fort Worth. The program originates in W. T. Grant's Department Store, the sponsor. Prizes are given for best household hints submitted and used on program. Contract is for 52 weeks.

Capsule Church
COMPLETE church service in miniature, complete to hymns by the choir, is presented on the new Sunday morning non-sectarian devotional program, The Church in Thy House, started recently on WSB, Atlanta. Brief sermons are given by Atlanta ministers, and choirs from individual churches supply the musical numbers.

Kitchen Capers
UTILIZING the entire WDZ, Tuscola, Ill., talent staff, The Kitchen Barn Dance is broadcast every weekday morning, 8:45-10 a.m. Hillbilly music, recipes and contests designed to reach the housewives provide the formula.

The 'Quiz Clock'
A. & S. LYONS, New York production agency, is offering for sponsorship to stations and agencies a new type quiz program What Time It Is!, designed for radio listeners rather than a studio audience. Written by Joe Liebman, the show is based on a "quiz clock" which listeners manipulate to answer the questions they hear on the program and then send in to the station. Winners are automatically checked on the dial of the clock and cash prizes are then awarded by the sponsor.

* * *
Clipped From the Films
NOVEL new show of KLZ, Denver, Off the Sound Track, is carried at 10 p.m. Saturdays directly from the local Orpheum Theatre. With a brief opening and closing by an announcer, the program is picked up from the sound track of the film showing at the theatre, affording an actual 15-minute sample of the attraction. The timing on the motion picture story is carefully worked out, with announcer's continuity written to fit the scene and action.

* * *
Insurance Problems
JOSEPH PATRICK LEE, New York insurance consultant, on March 20 started an audience participation program titled What You Think About Insurance. In New York, during which Lee discusses insurance problems with members of the studio audience. For a year, Lee has been conducting quarter-hour programs and using spot announcements on WAAT and WHOM, Jersey City, and WARD and WLTH, Brooklyn.

BOSTON'S biggest man and biggest horse barged into the studios of WBZ in mid-March for a special broadcast commemorating evacuation of the city by British troops. Edward J. (Knocko) McCormack, impresario of the commemorative parade, hoisted his 270 pounds on this 2,800-pound pensioner of the fire department. The special boots on Knocko's mount prevented damage to the studio floor during a sugar cube-induced center. Fred Hoey, sports commentator, described the carnival of heft.

112 QUARTER HOURS MORE!
Totalling 203 quarter hours for this week of March 18, WSAI already has 112 quarter hours MORE BUSINESS than last year during the same week.
And our contracted-for business volume is scheduled to up and up. Within a month, Wheaties and Mobilgas add 48 weekly quarter hours of baseball.
For seven consistent months, a steady influx of NBC Blue and Red network advertisers, local and national spot advertisers and announcement users has kept pace with WSAI's increasingly attractive programming.
All these facts have made WSAI the choice of those who wish more business sent their ways!

THE NEW WSAI . . . "Cincinnati's Own Station"
Represented by International Radio Sales, New York • Chicago • Los Angeles
South Carolina’s
ONLY
Regional
CBS
Station
WCSC
Charleston, S. C.
1000 watts
Free & Peters, Representatives

Gets Your Product Out in Front!

Things happen when WDZ puts your sales story on the air! Why? Simply because WDZ, Tuscola, is the hub of one of the nation’s best 锑ne areas. The WDZ, by this fast-growing station is almost evenly divided between prosperous agricultural, housing industrial and oil producing areas. Folks can do buy heavy. We’ve marshalled all the facts about WDZ and its trading area in an attractive brochure. Ask for it.

Howard H. Wilson Co.
Special Representatives
Chicago & New York
San Francisco & Kansas City

WDZ BROADCASTING COMPANY

Merchandising & Promotion

WCAE History—Birth Record—Guest Columnists
Aid to Buyers—From the Range Country

For Libraries
SPECIALLY bound booklet containing the history and complete data of WCAE, Pittsburgh, has been presented by the station to 50 branches of Pittsburgh’s Carnegie Library. The booklet was prepared by James Murray, WCAE promotion director, at the request of librarians, who said they have numerous calls for such information.

Free Digests
STRESSING the excerpt, “the lower the economic level, the more listening,” from the article, Radio vs. Reading, in the March Readers Digest, A. A. Alberty, WIBQ, Memphis, manager distributed 100 marked copies of the issue to key time buyers in Memphis claiming WIBQ has the “lower audience” referred to.

Twin City Clippings
AS A SPECIAL service to advertisers and agencies, KSTP, St. Paul, has inaugurated a clipping bureau of newspaper publicity on all sponsored shows. A set as light as red and black, picturing a newsboy on the front cover that headlines “Here’s News” and “All About Your Show from KSTP” is utilized as a folder for the smaller clippings. Label along the name list will be attached to all full-page sendouts. This is to be a daily service.

WPEN Discount Club
PLACED on a membership basis, the WPEN 429 Club offers members special discounts at stores of sponsors on the program and to local sporting events. Also, members only are eligible for ticket awards in a daily jingle contest being conducted in conjunction with the local showing of “Pinocchio”. Checks From Cokes
BLANK restaurant check books are being distributed to all Tulsa restaurants by KTUL, Tulsa, Okla. On the bottom of each check is the Coca cola Bottling Co.’s slogan with a written invitation on the reverse side to “Singin’ Sam daily on KTUL.”

Bantam Aides
AS AN EXAMPLE of how stations may utilize midget autos for special events and other promotions, Bantam Car Co., Butler, Pa., plans to feature KDKA, Pittsburgh, in its 1940 advertising and merchandising campaign.

WCCO Clippings
WCCO, Minneapolis, has offered 220 weekly and daily publications in the Northwest area the services of members of the station’s staff as guest columnists. Fifty-four selected, receiving such articles along with WCCO news and program schedules.

In Heir To Richmond
OUTSTANDING program of WMBG, Richmond, Va., are announced on a huge electrical “travelling news bulletin board” located in the heart of the business district.

Precision in Topeka
A GENUINE micrometers was attached to a promotion piece mailed by WIBW, Topeka, asking: “Which way do you measure your sales results—with a micrometer or with a cash register?”

Guide for Buyers
TO HELP merchandise the products of its sponsors, WQXR, New York, has established a “Buyers’ Guide” service which appears for the first time on the back cover of the station’s printed program booklet for March, sold on subscription to about 12,000 listeners. A line of type at the bottom of the 24-page booklet calls attention to the Guide on the back page, which lists products of the .station’s sponsors. The guide urges listeners to use the list when making purchases. The March Guide lists Aetna Life Insurance Co., Aqua Velva, Arrid, Botany Worned Mills, Ford Motor Co., G & D Vermouths, Gillette, Thymol, Italian-Swiss Colony wines, Jests, Lafayette radios, Martinson’s coffee, Simon’s English muffins and Venida Products.

Louisville Medley
STRIKING effect is produced by WHAS, Louisville, in a highly varnished red-and-black plastic-bound “brochure of the time.” It says, “there was a radio station that decided not to claim that it was the greatest, the best, the most powerful, etc. “But,” the brochure adds, “it decided that its call letters should be absolutely synonymous with the territory which it served from the very pioneer first-days of radio...”

For Auto Seats
AUTO slip covers at a low price are offered to listeners of the Crazo Radio Gang, sponsored over WBAP and the Texas Quality Network by the Crazy Water Co. Two different sets are offered, one for coupe and the other for coach or sedan, and the plan is to promote good-will for the program.

In Coast Weeklies
KPO-KGO, San Francisco, recently made a deal with the Conn Newspapers, 18 editorial district papers, in Oakland, for a front-page food column to be written by Olivey Cronkhite, editor of KPO’s Instruction Kitchen program. The papers have a total circulation of 40,000 weekly.

Symbol of the Range
EYE-CATCHING is the miniature saddle sent to the trade by KTSM, El Paso, with the advertisement “Here’s your saddle. Come ride the range with KTSM’s green with opportunities, etc.” The saddle is trimmed with shredded leather, blanket and and sets.

‘WSA I-Opener’ Revised
WSAI, Cincinnati, has revised its WSA I-Opener. A double-monthly trade promotion paper covering WSAI and Cincinnati trade news.

WFBG
ALTOONA PENN.
providing the only full coverage of the Altoona trading area.

Page 76 • April 1, 1940
The rallies is closely tied up with the Oakland Union Bus Terminal, a spot in the center of the city on busy Washington Blvd. With WXYZ cooperating in working up the broadcast angle, the display goes heavy for color.

Oakland C of C Tieup

OAKLAND (Cal.) Chamber of Commerce has named KROW, that city, as its official station. The Chamber recently launched a weekly program Dear Public, a series of oral “open letters” reporting and highlighting business development and community progress and brings to the microphone business and civic leaders of the community. The tie-up was effected by KROW General Manager Philip Lasky, who felt that the public knew too little of the Chamber’s work and of the major happenings of the community. KROW likewise is closely tied up with the Oakland Junior Chamber of Commerce.

For Younger Ears

RAY BARNETT, of the sales promotion department of KSFQ, San Francisco, has arranged a series of rallies at high schools and junior colleges. Jack Gregson, announcer, addresses the students on radio. The talks are informal, include a bit of entertainment and are point ed to attract the ears of the younger set to KSFQ.

For Younger Jobless

KYA, San Francisco, recently donated a weekly quarter-hour period to the Eighteen to Thirty Club, an organization of young people which strives to find suitable positions for young men and women.

WLAB, New York—Manila folder containing 28 small white cards giving facts and figures on feminine market coverage in New York City for Adela ide Hawley’s Women’s Page of the Air.

NBC—Eight-page promotion piece, “You Can’t Say That!” containing fan letters and pictures of typical listeners and participants for America’s Town Meeting of the Air.

WNAX, Yankeon, S. D.—Folder on Susan Taylor’s program for women. Tips by Taylor.

National Radio Personalities—Offset brochure by producer of station brochures, in format used for stations.


WNOX, Knoxville—Folder titled “Coverage,” with success story.

WOWO, Fort Wayne, Ind.—Promotional piece warning listeners of the danger of “gap-oups” in coverage.

WRVA, Richmond, Va.—Monthly Booklet WREX A Dialog sent to request list of 25,000.

KMPC, Beverly Hills, Cal.—Monthly four-page tabloid newspaper, News of Public, with pictures of staff and artists.

WPTF, Raleigh, N. C.—File-shaped folder listing market data and coverage maps.


WOR, Newark—Folder reprinting continuity presented on WOR’s 18th birthday by Gabriel Hunter.

WDBC, Hartford—File-simulating folder with colored offset inserts describing Blue Ribbon Programs.

FOR SALE

AVAILABLE IMMEDIATELY

BIGGEST MAIL-PULLING PROGRAM

ON KYW — “THE RED NETWORK STATION IN PHILADELPHIA”!

13,789 LISTENERS SENT IN OVER 16,000 DINES FOR A BOOKLET OFFERED ONLY ONCE DURING ONE WEEK IN FEBRUARY, 1940!

THAT’S PULL WITH LISTENERS!

WRITE, WIRE OR PHONE

KYW • PHILADELPHIA

OR NEAREST NBC SPOT SALES OFFICE

BROADCASTING • Broadcast Advertising

April 1, 1940 • Page 77
WITH Arizona’s tourist season in full swing and numerous radio stations from various parts of the state vacationing there, Fred Palmer, manager of KOFY, Phoenix, admits that he has been spending more time lately staging his nationally-transmitted steak dances than running his station and the Arizona Network. Among the artists at the large such functions have included Glenn Snyder, manager of KNOY, Phoenix; Al Hanson, manager of KFFB, Great Falls, Mont.; and Laemmle, manager, radio contract department of the Black-Samuel-Hummel, Chicago, and Burdette D. Butler, owner of WLS and KOFY.

KOIL, Omaha, has added to its production staff, a 12-piece studio orchestra under direction of Prof. Gary. The band was heard in March with two commercial shows — Yarn Petril, early morning quarter-hour sponsored by the Laundry Emery, and the half-hour weekly Monday show for Falstaff beer.

ADDED revenues during the first quarter of 1940 were enjoyed by KELO, El Dorado, Ark., by broadcasting all home school basketball games as well as four tournaments in South Dakota and North Louisiana. All sponsored by Wayne Copley, station owner.

WMAQ, Chicago, has arranged to tie up with the Chicago Daily News to broadcast Illinois primary election results in April and Special Sports throughout the evening will come from the editorial rooms of the newspaper.

CONDUCTED by Carl VanDegrift, originator of the Editors of the Editors, the WOAI, Fort Wayne, Ind., launched a sequel in the Tri-State area. A 15-minute program for round-up of football in the Fort Wayne area, culled from campus and daily newspapers, was welcomed by the programming department to promote relations with the press.

BASEBALL training camp color is transmitted daily to WEMP, Milwaukee, listeners via transcriptions made by Mickey Heath, manager, of the Milwaukee Braves at their Ocala, Fla., base. Interviews with baseball celebrities, latest baseball flashes and a daily award of $5 to the player telling the most humorous baseball anecdote constitute the program. An engraved cup will be given for the best story over the period of a season.

WHIO, Dayton, claims to be the only Ohio station to carry a broadcast from the scene of the March 16 explosion in a coal mine near St. Clairsville, Ohio. Dick Roll, announcer, and Lester Spencer, program director, left for the scene a few minutes after the blast and recorded a 15-minute program. The mobile unit traveled a total of 480 miles.

WOR, Newark, on April 5 will broadcast a special half-hour program from the dedication ceremonies of the industrial recreation center constructed by the Bristol-Myers Co. at Hillside, N.J. Lee Bristol, vice-president and secretary of the company, will act as host.

WQXR, New York, on April 1 is raising its commercial spot announcement rate from 33% to 50% because itsrophonic musical programs permit the use of only a limited number of such announcements per hour. The base rate will remain at $500 per hour. Evening spots will be $1.50 and daily spots will be $4.50 per hour. The service will be limited to 30 minutes per hour.

WBIG, Greensboro, N.C., broadcast the third annual Greensboro Golf Tournament at the Marion and Seaboard Country Clubs. The broadcasts, 15 in number, each for 15 minutes, were arranged by the Cocal-Cola Bottling Co.

PANEL discussions of sports by a group of leading sportswriters is the formula of the WKY, Oklahoma City, daily Roundtable of Sports started March 29.

NBC's foreign pickups from 29 countries during the week of April 6-9 totaled an all-time high of 700 broadcasts, according to A. A. Schlechter, manager of news and feature events, the number jumping nearly 200 over the 1938 total of 500 foreign pickups which do not include those made in United States territories and possessions, nor from Central and South America or Canada. News broadcasts made up 96% of the total, the other including industrial programs, holiday events, World's Fair data and "on the spot" war news.

TO COMMORATE the 50th anniversary of the Cadbury Packing Co. the March 19 broadcast of Bachelor's Children, presented serially on CBS, to a dramatization of the development of the American packing industry as it paralleled the growth of the company since its start in 1890.

A SERIES of auditions has been started by Toledo Civic Opera Assn. in collaboration with WSPD, winners to receive contracts to sing in summer operas in which New York professionals will take leading roles.

KFWB, Globe, Ariz., on March 22 dedicated new downtown studios during a broadcast by the Arizona Broadcasting Co. network, including KCTA, Phoenix; KVOA, Tucson; and KVI, Jerome.

The station had been staging programs from the transmitter building.
REPRESENTATIVES of various New York broadcasting stations met on March 15 with the group of Westchester women who recently instituted the "I'm Not Listening" campaign which seeks to have current radio programs considered objectionable. Among those speaking in defense of current radio affairs at that meeting in Mt. Vernon were Donald Shaw, executive vice-president of WMCA; Leslie Ryan Roberts, a vice-president of WMCA; and Al Simon, public relations director of WNY. Speaking on the women were Mrs. Everett L. Barnard, chairman of the campaign, who reported that the movement had spread to 49 States, and Mrs. Charles M. Phelps Jr. of Bronxville.

TO PROVIDE room for a new directional antenna this summer, a 12-acre site adjacent to the present transmitter has been purchased by KFRI, Salt Lake City.

A UNIQUE angle was added to the annual Easter service broadcast from the Grand Canyon's Shrine of the Ages over the Arizona Broadcasting Co. Network, when J. Howard Pyle, KTAR, Phoenix, program director described the rising sun from the floor of the canyon, one mile below the service on the rim.

MBW on April 3 will shift the news broadcasts heard on Steele and Waring's Root, the network's London and Paris representatives respectively, from alternate Fridays to an alternate Wednesday schedule, 11:15 to 11:25 p.m., which is the changeover throughout the spring. Sigrid Schultz, head of the Berlin bureau of the Chicago Tribune, continues on MBW alternate Sundays at the same time.

WINNERS of the 26-week search on the fifth season of Metropolitan Opera Audition of the Air programs for the best young American talent worthy of a place with the Metropolitan Opera Co. were announced on the March 24 program, sponsored by NBC Blue by the Sherwin-Williams Co. Miss Eileen Steuber, Omaha, and Arthur Rent, Baltimore, were the winners, each receiving a bronze plaque and $1,000 from George A. Martin, president of Sherwin-Williams. Emery Darcy, tenor, received an Audition Fellowship of $500 as runner-up.

WOR, Newark, on April 3 will take the Where Are You? Frant series of weekly programs, which have been heard on WQXR, New York. WQXR retains an option in the program after the move in view of possible sponsorship of the program. Dr. Henry Lee Smith, English lecturer at Columbia U., New York, conducts the program during the week, and attempts to test members of the studio what season of the country they are from after hearing them speak in key words.

KVOC, Santa Ana, Cal., located in new offices at 307 N. Broadway, that city, on March 15 held its formal opening with city and county officials attending, and Ernest L. Spencer, general manager, serving as host. Besides many exhibits pertinent to modern radio, guests attended the premiere of a television program from WXA0, the Los Angeles telecasting station of Don Lee network, of which KVOC is an affiliate.

AS ITS PART in observing the 12th annual anniversary of Ams 'n Andy, WBNZ, Cleveland, had a greeting consisting of 2,000 birthday cards signed by Central Office personnel, and WKRE, Youngstown, O., has started two new safety campaign programs - the quarter-hour Backseat Driver series, under the leadership of the American Legion, and safety talks by traffic experts of the Youngstown police department.

WBCG, Hartford, Conn., has been publicly cited by Gov. Baldwin, for its continual policy of highway safety reminders. Short, casual announcements at the conclusion of all programs urge motorists and pedestrians to be cautious.

WBT, Charlotte, N. C., in mid-March claimed a scoop on its coverage of the fire which destroyed an 80-family apartment house, largest blaze in the city's history. The fire started about half an hour after midnight when WBT's Midnight Dancing Party went on the air. A phone call from an apartment tenant told WBT that WBT announcers to the scene a few minutes after the blaze was discovered, before the fire department arrived. Don Kerr, WBT announcer planned a running story of the conflagration to the studio from a filling station within a few minutes of the fire, and WBT carried the description at three-minute intervals between recordings on the Dancing Party broadcast. First other news did not come until five hours later, with early morning newspaper editions, according to WBT.

SPORT quiz program contest on CILS, Yarmouth, N. C., conducted by Bob Hollinger, station manager, was won by former Toronto footballer, Jim Harrett, whose prize was a trip to his home town to see the playoffs of the Toronto Maple Leafs and Chicago Hawks hockey teams. Hollinger also hailed from Toronto, so CILS was featured by Toronto sport columnists of the daily press.

KFIZ, Fort Worth, Tex., again this season carried the broadcasts of the Fort Worth Cats exhibition games, with Zack Hart, football commentator, handling the play-by-play. The broadcasts, extending from March 23 to April 9, are a buildup for the official opening of the 1940 season, during which KFIZ has exclusive broadcast privileges. The season opens April 12.

ENZO COTRIVO, director of the Italian Hour on WAGA, Cleveland, was instrumental in reuniting a father and son who had not been together in 25 years. Cotronvo received a letter from an Italian woman in a distant city who asked his help. She explained that she had left her husband and taken their two-year-old son 20 years before. Now she wanted to be reunited. Cotronvo said the plan was to bring the family together again within the week.

TO MAKE way for the erection of a new 11-story office building, WMRA, Macon, Ga., has moved to temporary studios on the top floor of the Grand Theatre Bldg. Upon completion of the new structure, WMRA will occupy the top floor.

CXY, Winnipeg, celebrated its 17th birthday March 13, having opened in 1925 as the first government-owned broadcasting station in Canada. The station is still owned by the Toronto provincial government, but the monopoly which the province held for years has now been removed, and 15 other stations now operating in the province have been granted private licenses.

WHK, Cleveland, accomplished a pickup recently when the Cleveland fire department staged a demonstration parade between three old and three new fire trucks along the Lakeshore Drive. Announcer Carl Macky boarded one of the trucks with a 10-watt truck transmitter and broadcast a running description of the parade, the transmitter being picked up directly by WHK's Terminal Tower.

FOR THE 10th consecutive year, KECU, Los Angeles, opened on March 22 its annual Good Friday Dramatic Feature, The Crucifixion, and also for the first time released it to the West Coast Pacific network. Written by Charles R. Kennedy, it was originally intended as a one-act play for three voices to be presented in eight minutes. Time and place are indefinite, but throughout action is paralleled to the Crucifixion.

PACIFIC Coast intercollegiate ski championships were broadcast for the first time from the Yosemite Valley by KSFO, San Francisco. R. W. Dunm, special events director of the station, John Nelson, announcer; R. V. Howard, technical director, and Clarence Stevens, engineer, conducted the broadcasts three days via KSFO's portable shortwave transmitter.
Industry Gives FM Views at Hearing

FCC Hears Witnesses Tell of Advantages, Limitations

(Continued from page 21)
of the AM transmitter—a 5 kw. transmitter costing about $20,000 and 1 kw. from $8,500 to $9,500. These prices will drop, he predicted, when volume production is attained. The relatively higher cost of FM receivers, also reflected from limited production, stems from the need for higher range audio and loudspeaker construction, he explained. The present lowest-price console receiver with standard broadcast, shortwave and FM reception, sells for $145, and its selling price will lower materially as production is increased, he said.

Commenting on the price factor of radio in its progressive pioneer stages, Maj. Armstrong cited his experience at the time he introduced his revolutionary system. "In 1914, he demonstrated it to a group of engineers representing RCA, Westinghouse and General Electric Electric..." The consensus was that although operation was fine, such a set could not be built for commercial markets for less than $400 or $500. At this time (1924) he told them he believed they could build the tube receiver for about $200, and finally it was built for $268. At present a six-tube superheterodyne set "iswards superior," he said.

Commenting further on the price factor, Maj. Armstrong declared, "In all my inventions I have made the mistake of estimating the price too high, and in the next few years I am going to conrue me for lack of vision." As FM broadcasting becomes a common occurrence, he said, the present price for a single receiver, now about $700, will probably give way to straight FM receivers, he added.

Queried by Commissioner Brown, he estimated that between 2,000 and 3,000 sets capable of receiving FM signals are now in use, divided quite evenly as to price range from the $145 combination set to a high of about $215. Also available and in use are table model FM sets selling for $65.50 and up. He stated these are so constructed so that the receiver's detector circuit can be plugged into a console on an AM set and operating by themselves can give high-fidelity reception. He explained, although quality of reception is limited because of the small size speakers in small cabinets. He agreed with an observation by Commissioner Craven that size is a great factor in any audio system, and that the size of the receiving set imposes limitations in either AM or FM construction.

"From all my experience I have found that a receiver will be supplied which will sell for a price that the public is willing to pay," he commented.

INVENTOR of FM is Maj. Edwin H. Armstrong, shown as he opened the hearings before the FCC March 15. What was to have been his two-hour presentation resulted in a two-day appearance covering virtually all phases of broadcast allocations, economics and science.

had been sold several years later for $425. As against this direct income from these three inventions, he estimated he has put between $700,000 and $800,000 of his personal funds into the development of his FM system.

As an example of progressive broadcasting, he said, "In the case of Armstrong licenses will be fully protected in the matter of newly-patented improvements, he assured the FCC.

As he is in the habit of such an operation "coming under the teachings" of the basic FM patents, then a narrow-band system would be subject to the Armstrong patents.

Going into the corollary equipment necessary for good FM reception, Maj. Armstrong stated that although no complicated receiving antenna was needed, use of a double dipole antenna will add materially to the scope of reception. He pointed out that directional characteristics of such an antenna would permit wider selectivity of stations as well as reception of weaker signals.

Craven Interested In National Allocations

Explaining that he was desirous to get a more concrete idea of Maj. Armstrong's allocations recommendations, Commissioner Craven produced a chart of his engineering department showing a prospective allocating of three 50 kw. FM stations on two channels and 25 1 kw. stations on two other channels covering the New England area. Asked whether this fit his previous statement that "hundreds" of low-power stations with "definitely circumscribed" service areas could operate on the same frequency and give a wide aggregate broadcast service, Maj. Armstrong protested that the specimen allocations were premised purely on geography and that he could not give any meaning answer to such a question until he had an opportunity to study the situation from its varied aspects.

He pointed out that allocation on a geographic basis did not amount to much, since it disregarded such important factors as topography, and stated that although conductivity was not a particularly important consideration for FM, there was a great difference between a transmitter located on a mountain top and one placed atop a 200 or 300-foot building in the center of a city when FM is considered.

As an example of progressive broadcasting, he said, "In the case of Armstrong licenses will be fully protected in the matter of newly-patented improvements, he assured the FCC.

As he is in the habit of such an operation "coming under the teachings" of the basic FM patents, then a narrow-band system would be subject to the Armstrong patents.

Going into the corollary equipment necessary for good FM reception, Maj. Armstrong stated that although no complicated receiving antenna was needed, use of a double dipole antenna will add materially to the scope of reception. He pointed out that directional characteristics of such an antenna would permit wider selectivity of stations as well as reception of weaker signals.

Craven Interested In National Allocations

Explaining that he was desirous to get a more concrete idea of Maj. Armstrong's allocations recommendations, Commissioner Craven produced a chart of his engineering department showing a prospective allocating of three 50 kw. FM stations on two channels and 25 1 kw. stations on two other channels covering the New England area. Asked whether this fit his previous statement that "hundreds" of low-power stations with "definitely circumscribed" service areas could operate on the same frequency and give a wide aggregate broadcast service, Maj. Armstrong protested that the specimen allocations were premised purely on geography and that he could not give any meaning answer to such a question until he had an opportunity to study the situation from its varied aspects.

He pointed out that allocation on a geographic basis did not amount to much, since it disregarded such important factors as topography, and stated that although conductivity was not a particularly important consideration for FM, there was a great difference between a transmitter located on a mountain top and one placed atop a 200 or 300-foot building in the center of a city when FM is considered.

As an example of progressive broadcasting, he said, "In the case of Armstrong licenses will be fully protected in the matter of newly-patented improvements, he assured the FCC.

As he is in the habit of such an operation "coming under the teachings" of the basic FM patents, then a narrow-band system would be subject to the Armstrong patents.

Going into the corollary equipment necessary for good FM reception, Maj. Armstrong stated that although no complicated receiving antenna was needed, use of a double dipole antenna will add materially to the scope of reception. He pointed out that directional characteristics of such an antenna would permit wider selectivity of stations as well as reception of weaker signals.
FREQUENCY MODULATION
(ARMSTRONG SYSTEM)

Now REL
MODEL 521
50 KW F-M Transmitter

First to Develop

Original equipment at W2AG (Yonkers, N. Y.) and at W2XMN (Alpine, N. J.) was developed at REL in collaboration with the inventor, Major E. H. Armstrong.

First to Produce

F-M Equipment for the following:
- 15 W Portable Mobile Transmitter.
- 1000 W High Fidelity Broadcast Transmitter.
- 50 W Portable Broadcast Relay.
- 2000 W High Fidelity Broadcast Transmitter.
- 50 W High-Fidelity Studio-Station Relay.
- 3000 W High Fidelity Broadcast Transmitter.
- 200 W High-Fidelity Studio-Station Relay.
- 5000 W High Fidelity Broadcast Transmitter.

Now in Daily Service

REL F-M Transmitters are no longer in the experimental stage, as proved by the following list of stations which are now servicing the public daily:

<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>OWNED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>W2XMN</td>
<td>Alpine, N. J.</td>
<td>Mel, E. H. Armstrong</td>
</tr>
<tr>
<td>W2XIC</td>
<td>Yonkers, N. Y.</td>
<td>C. R. Runyon, Jr.</td>
</tr>
<tr>
<td>WIXOF</td>
<td>Paxton, Mass.</td>
<td>Yankee Network</td>
</tr>
<tr>
<td>W2XGD</td>
<td>Boston, Mass.</td>
<td>Yankee Network</td>
</tr>
<tr>
<td>W2XO</td>
<td>Washington, D. C.</td>
<td>Jansky &amp; Bailey</td>
</tr>
<tr>
<td>W2XV</td>
<td>Rochester, N. Y.</td>
<td>Stumbo-Cartlon</td>
</tr>
<tr>
<td>W2XQR</td>
<td>Long Island City, N. Y.</td>
<td>J. V. C. Hogan</td>
</tr>
<tr>
<td>W2XAR</td>
<td>Rochester, N. Y.</td>
<td>WREG, Inc.</td>
</tr>
<tr>
<td>W2XOR</td>
<td>Newark, N. J.</td>
<td>Bamberger Broadcast Service</td>
</tr>
</tbody>
</table>

and the following are now being built by REL:

<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>OWNED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGAN</td>
<td>Portland, Me.</td>
<td>The Portland Broadcast Sys. Inc.</td>
</tr>
<tr>
<td>W2XWI</td>
<td>Detroit, Mich.</td>
<td>The Evening News Ass'n.</td>
</tr>
</tbody>
</table>

A large percentage of the construction permits now on file with the FCC calling for F-M equipment specify REL transmitters.

We invite engineers and executives to profit from our experience as the pioneer builders of successful F-M Transmitters.

Various components of the REL 50 KW F-M Transmitter are here illustrated.

Above—top—shows the power amplifier unit before it is mounted in its shielded room. Immediately beneath is the central control desk, which contains all monitoring equipment.

To the right—
1st—Power control.
2nd—Rectifier Unit.

These units are only part of the complete station. All units are assembled in a building particularly designed for the purpose.
stands largely on the attention given it by developmental engineers, he commented. However, its first appearance on the air was a 25-watt, single-point relay, as he predicted in 1936 he stated.

**Receiver Design Well Advanced, He Says**

Most FM receiver design problems have been met, and present receivers are capable of giving first-class service. Although further improvements are likely to come, he said. He emphasized that manufacturers in bringing out FM sets had equipped them with audio and reproduction facilities capable of handling the increased efficiency of FM transmission. He commented further that the industry is "on the verge of the greatest development in average, from a production standpoint".

FM can be applied readily to educational and commercial stations above 25 mc, he stated. Since these stations immediately face a receiver problem, even with AM operation, the transmitters could be converted to FM and the stations would get a ready-made FM audience, he explained. Applied to police radio, frequency space savings effected in cities probably would be set aside as far as was extended to the state police systems, he said.

While cross-examination by Lieut. Jett, FCC chief engineer, Maj. Armstrong reiterated that because of bad skewwave reflections in the 27–28 mc band, he had found experiments on operation in frequencies above 40 mc. Mr. Jett then called attention to the proposition that if 440 local stations operate, as they do, on six channels in the standard broadcast band (6 stations per channel), and if 42–44 mc were assigned to FM operation, the latter band, if wide, would probably be more significant of FM characteristics, could be accommodated in these 10 FM channels.

As a geographic allocation this would be true, but the service areas in the latter case should not be cramped, he suggested. As local stations operating on AM, Maj. Armstrong cautioned. In order to give as wide an area as possible, he reiterated, two types of FM stations must be used, and the 80 kw. stations designed to serve wide areas could not be operated without more channels.

**High-Fidelity Standard Brings Varying Views**

This observation caused Chairman Fly to point to the "embarrassment of ransfering other services for FM, which on the one hand is advanced as a means of saving other space by allowing hundreds of stations to operate on a single frequency and on the other hand needs more and more space. There is no doubt that FM will relieve the problem of the present broadcast band," Maj. Armstrong declared, adding that although he did not expect it he expected it "before long". However, if FM is to accomplish rural coverage to any extent, it will be necessary that the maximum number of 60 kw. stations, not duplicated within 300 miles, he added.

A discussion of what constitutes high-fidelity was precipitated by Chief Engineer Jett in pursuing his cross-examination of Maj. Armstrong. Whereas the inventor had selected 15,000 cycles for high-fidelity, Lieut. Jett inquired whether 10,000 or perhaps 11,000 might not suffice and still afford greater fidelity than now available. Maj. Armstrong said there was a great deal of conflict regarding high-fidelity and that he felt 15,000 cycles is desirable to give greatest "naturalness" to reception.

Presumably aiming his questions at possible reduction of the 200 kc. band width urged by Maj. Armstrong, Lieut. Jett suggested that perhaps tests first should be undertaken to determine the necessary band widths for so-called high fidelity. Commissioner Craven observed that 8,000 cycles is the "top level" insofar as the auditory appreciation of the average person is concerned.

The effect of multiplexing facsimile on the same channel as FM is an increase in the signal to noise ratio, Maj. Armstrong replied to Jett. He pointed out that only 10 kc. of the 200 kc. band is used for facsimile.

**Ordinary Licensing Necessary, Says Fly**

When Lieut. Jett raised the question of use of ultra-high frequencies for FM, Maj. Armstrong said "Commissioner Craven that if both the transmitter and the receiver are properly designed there would be no serious effect on existing television sets." Cross-examined by William H. Bauer, FCC attorney, regarding the use of narrow band FM, Major Armstrong said he would receive royalties under his arrangement both from transmitter and receiver manufacturers. He said he understood RCA has two patents for narrow band FM but he described it as the "old type". Principal holders of FM patents, aside from himself, Maj. Armstrong said, include Hazeltine, RCA, AT&T, Westinghouse and General Electric.

**CBS Urges Preference For Video Service**

Maj. Armstrong completed 8½ hours of testimony just prior to the afternoon recess March 19. He had intended appearing for about four hours, and contemplated testimony of two other witnesses in his behalf. The other witnesses were not called.

CBS did the unexpected when Paul A. Porter, Washington counsel, advised the Commission March 19 upon completion of the Armstrong case, that no testimony would be offered on behalf of the network unless subsequent developments made it desirable. He pointed out that the FCC has FM applications pending, (New York City and Minneapolis) but that the network feels "preference should be given to the new service of television and not to another aural service". He asked the right to file a statement, if it became necessary.

Appearing without counsel, Everett L. Hard, owner of the Commercial Radio Equipment Co. of Kansas City, manufacturer of specialized radios and equipment for police department stations, as well as operator of WIXA, high-frequency amplitude modulation, urged the FCC to discontinue any results of that experimental operation. While he had no practical experience, he said and he had concluded that AM operation is less satisfactory than FM and that he could not see how any improvement by the FCC could improve AM operation in the high-frequencies. Yet complete faith in the high-frequency range for broadcasting, he said the results of his experimental operation for a service of quality equal to standard broadcasting can be provided in those ranges. The biggest obstacle today to FM transmission, he said, is lack, of recipients capable of picking up the signal, and that AM is not duplicatable to the lack of interest of the public in listening to such broadcasts, he said. Duplication of programs transmitted by other stations is not the answer to this problem, he continued. To specialise in AM, he said, is to avoid it is necessary to conduct a distinctly different type of program and that is not a duplication elsewhere.

**Problem of Automotive Noise Is Considered**

Based on his observations, Mr. Dillard said that a signal to noise ratio of 35 to 1 is necessary to provide an interference-free service in the high-fidelity satisfactory that the FM signal can be procured at a 30 to 1 ratio, he declared. He emphasized that the signal be transmitted only to AM rather than FM.

Mr. Dillard stressed the need for uniformity of ignition systems and he urged that the FCC take steps to bring about cooperation of the automotive industry in suppressing ignition noises, pointing out that a very inexpensive suppressor can be employed, costing only about 10 cents per car.

Because of the absence of static, electronic disturbances, Mr. Dillard said it was his belief that standard broadcast stations would be glad to move to the ultra-high frequencies. He urged that horizontal, as opposed to vertical polarization, be employed in the ultras, as a means of eliminating serious interference sources.

Mr. Dillard suggested the FCC revise its present local rules. Pointing out that all services want continuous bands in the ultra-highs, he said that the public will never get what it wants. He urged the Commission to cease parceling off small portions of the spectrum and sandwiching in other services. He suggested that the range 41–44 megacycles be staked
off exclusively for aural entertainment broadcasting. That would greatly simplify receiver construction, he declared.

Asked by Chairman Fly why he favored FM over AM, Mr. DiLard said that so far as quality is concerned, he felt it was just as good as AM. He also indicated that the signals from broadcasts can be delivered under the Armstrong system with a more satisfactory signal. His main thought, he said, was to give the public the same system and not a combination of two.

He pointed out that FM broadcasting in the standard band had not been developed to its present stage when it was limited by experimental operation. The only concern, he supposed, was that FM would lose some stations. The only receivers in existence were the facsimile, on the same band.

Shepard Recites
Events in FM1-B formation

Leading off as the first of 11 witnesses for FM Broadcasters Inc., John Shepard 3d, president of Yankee Network and head of the FM organization, took the stand to open the March 20 session. Under questioning by Philip G. Louds, chief counsel for the group and former NAB managing director, he briefly reviewed his experience as an operator and leading industry figure and told of the history of Yankee Network’s participation in the experimental operation.

Yankee Network, in addition to WNN and WAAB, Boston, WEAN, Providence, and WICO, Bridgeport, owns and operates WIXY, 500-watt high-frequency AM station, WIXOY, potential 50 kw. FM transmitter, and WIXD, 250-watt FM relay transmitter, all located in the Boston region, Mr. Shepard stated.

Reviewing the formation of FM Broadcasters Inc., which he described as a group formed to further the interests of the stations, he noted that the group had been incorporated in December, 1937, to all FM operators, granted and applicants that a meeting was to be held in New York Jan. 5, to evolve a group stand on FM matters. The organization was incorporated following the meeting, attended by representatives of 65% to 90% of the prospective FM operators at the time. A list of 55 members of the group, as of March 18, was entered as an exhibit, stating that a total of 69 were eligible for membership.

Mr. Shepard individually amplified a series of 11 resolutions adopted by FM Broadcasters at the Jan. 5 meeting and ratified at the organization’s first annual meeting, held March 17. These also were entered in the record as an exhibit.

Eleven-Point Program Reviewed by Shepard

The first resolution requested the granting of regular, instead of experimental, licenses for FM operations. Mr. Shepard stated that the group believes FM can furnish a regular broadcasting service equal to, or bettering, the present service on the standard broadcast band. Pointing out that broadcasting in the standard band could not have developed to its present stage had it been limited to experimental operation, he declared that the organization asked that FM in the ultra-highs be given the same advantages as AM had been given in the standard band.

Mr. Shepard pointed to the regular operation of WIXJO, Yankee’s FM station, on an 8 a.m. to midnight schedule as an illustration of practical operation, but noted that “some prospect of commercial return is necessary for full development of FM broadcasting”. Although improvements can be expected in FM operation, he declared, there was “no need for further experimentation before additional FM on a regular operation basis. Under the present experimental status, he observed, the large majority of FM applicants are operators and are therefore interested in FM because they have financial resources sufficient to enable them to operate experimentally, while the experimental restriction tends to exclude the smaller operators.

Other resolutions recommended ratification of the proposal that a position limitation be 1 kw. to 50 kw., a minimum separation of 200 kw. between adjacent FM channels, “therefore essential in order to accommodate facsimile by multiplex transmission and because narrow-band transmission may be carried on within such channels (while wide-band could not be carried on the FC);” more than five adjacent channels as “essential” for FM.

Suggests Educational Stations Use FM

The fifth resolution recommended allocating the 41.44 mc. band to FM stations, with facsimile broadcasting using FM on frequencies coordinated with sound broadcasting, and giving “due consideration to educational and facsimile transmission.” The last point elicited the query from Commissioner Caven about whether FM Broadcasters meant to take away the 41.42 mc. band from educational stations and give it to FM operators, and whether the proposal called for a shift of educational facilities to other frequencies. Mr. Shepard explained it did not mean depriving educational facilities but instead switching a switch of educational stations from AM to FM, operating on that basis.

He said if educational stations were to use FM, they would give a better service and achieve a wider coverage.

The sixth resolution, recommending allocation of the 51 mc. band to FM, was not assigned to FM, to other services, was explained by Mr. Shepard as a step toward simplifying the prospective receiver design problem. He argued that from the receiver standpoint, FM should be developed on adjacent channels.

The seventh resolution provided: “In our judgment 15 channels will not prove sufficient for the needs
of FM, and immediate provision should be made which will insure the availability of additional channels in the near future, and that from the present view of receivers and channel design, the additional channels should be as nearly adjacent to the AM band as possible. While without injuring other services. Respecting briefly to queries on this observation, Mr. Shepard commented that it is possible to go ahead on 10 commercial and five educational channels, “public acceptability will not be a question need for additional channels”.

The eighth and ninth recommend-
ed to the FCC for establishing authorizations for stations on the same and adjacent channels for varying power, and setting an “established policy of permitting the overlapping of broadcast broadcasts between stations subject only to permission of originating stations, as is the rule in the regular broadcast band.

Favors Policy

Of Relay Stations

The tenth resolution, requesting the FCC to establish a policy of “permitting relay stations on FM brought intensive questioning from Chairman Greenleaf, Commissioners. Pointing to the peculiar need for locating FM transmitters to take some of the high spots in the terrain, often at inaccessible locations not served by telephone lines, Mr. Shepard said the transmission would be solved by setting up lower-power relay stations, using about 250 watts power, to transmit frequencies above 130 mc, beam them, for instance, to phone locations.

The question was raised by Mr. Craven who would foot the bill for a network of relay stations, presumably established to widen coverage. Mr. Shepard explained that a network such as NBC or CBS, if relieved from the payment of line charges, would pay for construction and operating costs of a relay system, while a mutual organization such as NBC-AM would pay for the relay as it does at present with line charges. Although no such plan has been so far defined by the FCC, the conversation had been on the air, he said, and the relay system would develop if the FCC did nothing more than assign frequencies and frequencies to be used in two-way six stations and the WIXOJ transmitter as the main beam, or the 250-watt WEOO as a relay.

The final resolution reiterated the recommendation that provision be made in the FM band so as to not to exclude educational and facsimile transmission, the latter either on multiplex or simplex transmission.

Concluding his discussion of FM broadcast programs from an organizational standpoint, Mr. Shepard reviewed the membership of the engineering committee of the organization, entering the list in the record.

Claims Superior

Service Via FM

Relating his experiences as a regular FM listener during WIXOJ’s operation the last seven months, Mr. Shepard observed that after listening to FM Broadcasting for two or three hours nightly and then switching to AM reception “you realize you have been listening to something startlingly natural” and get the impression that AM reception and reproduction is unsatisfactorily well received because in superior service characteristics of AM, he continued that “par for par, we are light for height, and you can compensate to get the same coverage in the ultra-highs with AM as with FM”. He added that “AM transmission does not reduce static in the ultra-highs as does FM.

For spots from in Northern Virginia and Washington, he estimated that rural New England could be effectively covered by transmitting in AM. He also estimated the interference of super-high AM transmitters that would furnish super-high signals to inaccessible points.

Although it will take some time for commercial programs to reach FM stations’ schedules, since an audience must be built up to attract advertisers, he commented that eventually he sees FM replacing AM and operating with users only using FM transmitters. He indicated that he would like to undertake a transition period of roughly “10 years”, during which the FM audience would constantly grow, and the AM was to be shrunk, and at the end of which the advertiser would be reaching the same markets.

During this period the station operator probably will use both AM and FM to maintain an audience throughout the afternoon. As he pointed out, that it will be practical to use the two systems together with almost a 100% placement of AM sets is achieved. In the normal course of events about 10% of the receivers are replaced annually, he also pointed out, and where FM service is available, others will likely obtain straight FM or combination sets. This combination operation would increase the cost to the station operator, he admitted, but not 100%, since only the final stage transmission would be duplicated.

Favors Separate

Programs for FM

Duplication of standard broadcast programs for FM transmission should not be permitted, Mr. Shepard commented, but FM program development for FM should be encouraged. If FM is given the green light, he said, his business would extend its schedule from 8 a.m. to midnight, 6:30 a.m. to 1 a.m., he indicated.

Answering to an inquiry by Commissioner Craven, he explained that although it was not necessary that FM programs prefer other services in allocation matters, keeping FM allocations compact would be best for FM signal interference. As for other services concerned, he commented, FM stations should operate on higher frequencies. However, transmitting FM bodily into higher frequencies might mean FM development at least “a year or two”, he estimated. Also, he added, putting any “straightjacket” on the location of stations would stunt FM’s development, and the same program freedom should be allowed FM as is now given in AM broadcasting.

Cross-examined by Mr. Jett, the Yankee president emphasized that he did not advocate the use of FM for technical reasons, such as FM is not needed, the residue could be used in another manner. FM licenses should be available to both as well as to new parties, he declared, without preference.

Appearing as the second witness for the residuary Commission, Mr. Greenleaf Whittier Pickard, consulting engineer for NBC, stated that Pickard’s one of American radio’s venerable pioneers. Inventor of many devices, he is perhaps best known for his development of the crystal detector.

科学的方面，关于 FM 覆盖的 stations license of as of the viewpoint by Dr. Greenleaf Whittier Pickard, consulting engineer for FM broadcasters, Dr. Pickard is one of American radio’s venerable pioneers. Inventor of many devices, he is perhaps best known for his development of the crystal detector.

Concerned, independently of the present broadcast service reflected in standard band allocations. At this Chairman Fly declared, “It seems to me you all your recommendations are for complete freedom—freedom to do all the good things on the standard broadcast band”. The chairman then repeated his desire to have FM Broadcasters submit a formal allocation plan.

At this point Mr. Bauer, FCC attorney, introduced a series of four FCC exhibits—a summary of pending high-frequency radio broadcast applications, a list of high-frequency stations, a list of applications for March 12, a compilation of rules governing broadcast service other than standard bands, and FM transmitters, those rules giving frequencies allocated for various classes of stations.

Pickard Tells of

Noise Studies

Mr. Shepard concluded his appearance as FM programmers, Dr. Frank W. Wozencraft, RCA counsel. He stated that he believed better results would come from use of 15 channels of 200 kc. than 30 channels 100 kc. wide. Carried into the FM-frequency field under Mr. Wozencraft’s questioning, Mr. Shepard said he could not say that all FM transmitters were free of interference. Interference was in conjunction with their FM operations. Asked if operators not including facsimile should be given the full 200 kc. assignment when it is shown that they would only need 156 kc. without facsimile, he declared they should be allowed to develop on the basis of a 200 kc. band, although it was later determined that the full space was not used, the residue could be used in another manner. FM licenses should be available to both as well as to new parties, he declared, without preference.

Appearing as the second witness for the residuary Commission, Mr. Greenleaf Whittier Pickard, consulting engineer for NBC, stated that Pickard is one of American radio’s venerable pioneers. Inventor of many devices, he is perhaps best known for his development of the crystal detector.

Yankee Network, reviewed the results of studies during the last two years. From his experience in these tests, Mr. Shepard said that FM service is available, regularly is better than the standard broad-cast service, but that points as a specific instance the reception at his home, at Seabrook Beach, N. H., approxi-mately 35 miles north of Boston, and the frequency he observed was W1XXOJ, 67.5 miles away.

Describes Characteristics

Of Ultra-High-Signals

Under cross-examination, Dr. Pickard explained that exactly opposite conditions are recommended for AM stations, as against standard broadcast stations. Whereas the AM stations operate at maximum propagation from low swamping ground, ultra-high frequencies, he declared, is not a suitable idea because of the line-of-sight characteristics.

Questioned by the RCA Counsel Ward, Dr. Pickard said that under present manufacturing technique, the effort is to “pre-emphasize” the FM transmitters and “de-emphasize” them at the receiving. He asserted that static is less on AM than on FM, and that frequencies, though still present. One reason for the popular misconception, he said, was that the super-regenerative receiver “shuts out” the ultra-high signal when the noise from the signal, he added, though there is apt to be more noise than in the case of FM, caused by automobile ignition systems.

When Commissioner Craven queried regarding the owning of the Alpine experiments, during which two FM stations operated from approximately the same location and could be separated on the receiver, Dr. Pickard said it was because there were two high-power stations in the same city on adjacent channels with no interference. In states of low population, a frequency separation of at least 50 kc. is required in the same metropolitan area. Dr. Pickard pointed out that his listening operations were made under very unfavorable conditions, from locations using short antennas.

Martino Tells of

Hartford Operation

Italo Martino, chief engineer of WBDI, Hartford, operates WIXWJ, reported on a coverage survey of that station. He testified that he found that FM reception at varying locations was far superior to that of standard AM stations in the area.
despite the fact that W1XPW used only 1,000 watts output.

His survey covered the entire State of Connecticut, he said, and as a result of these tests the conclusion was reached that a field intensity of about 10 microvolts per meter is required to produce satisfactory service in quiet rural districts. In the majority of cases, even with good terrain, an intensity of 50 to 60 microvolts results in perfect reception. In very noisy locations, an intensity of 300 microvolts was found necessary to completely suppress noise.

In making the tests, in general, he concluded, that good reception from W1XPW can be expected from most points in the state except noisy localities where the field intensity falls to a low value, despite the very rugged terrain. Additional power above 1,000 watts would be required to serve satisfactorily certain sections where the signal is weak due to shielding; hills or other obstructions.

WSIWN Propagation Explained by Gallerup

Dan W. Gallerup, chief engineer of WTMJ, Milwaukee, explained WIXAO with 1,000 watts on 42.6 mc., gave a similar report on propagation of WIXAO with 1,000 watts on 42.6 mc., he said, the results based on his observations revealed a very good signal with about 150 microvolts received in the Accredited Signal Area. He noted that the signal was received in the Accredited Signal Area with about 150 microvolts received on the Accredited Signal Area. In the Accredited Signal Area, he noted, the signal was received in the Accredited Signal Area with about 150 microvolts received on the Accredited Signal Area.

Channels Desirability Explained by Pickard

Recalled by Chairman Fly at the opening of the March 21 session, Dr. Pickard for one hour answered questions put to him by the chair and Chief Engineer James. He talked about the desirability of various radio-frequency channels. He commented that the characteristics of the 26.0 mc. band, as deduced from his experiments, Dr. Pickard, he said, were not those of the amateur 10-meter band or channels in the 40-50 kc. band, except that diffusion characteristics are such that groundwave "shadows" caused by hills or other obstructions are "not so black." He noted also that the lower frequencies yielded more static, and that they were less subject to interference from some special service such as forestry, police or aviation.

Studying FM reception on the 26 mc. band and also in the 40's would be a "bother" to the listener because it would result in shifting from band-to-band in tuning, he stated. In summer areas, where low frequencies are good, an attempt was made to operate in the higher ultra-highs.

Asked by Lieut. Jett why frequencies in the 25-27 mc. band were not assigned them, Dr. Pickard stated that these services are less critical and hence could better use them than regular broadcasters.

Noble Tells How FM is Superior

Prof. Daniel E. Noble, assistant professor of engineering of Connecticut State College, followed Dr. Pickard to the floor. He explained how, after becoming interested in the Armstrong FM system several years ago, he set up an experimental Armstrong transmitter and later, as a consultant to WIXAO, designed and supervised the construction of the WIXAO transmitter on Meriden Mountain, he added, and at present designs a narrow band transmitter in the Storrs area.

Based on his listening, using a Thaddeus Davis model developed by Maj. Armstrong and an antenna consisting merely of a short length of open wire over the vermicular house in the town, he heard about 40 miles from both the Paxton and Meriden Mountain transmitters, he said. He stated that an "excellent broadcast service" was receivable from both WTXF and WIXOJ, with stations ranging from 18 to 34 microvolts per meter. His observations were based on a six-month period and were made during quiet periods, he explained, with signals of the FM stations comparable in strength to that of a 150-microvolt signal. He stated that the 25 miles distant, and other AM stations.

"Definitely more pleasant to listen to and afield, was "really nice" for forestry and police, Dr. Pickard stated that these services are less critical and hence could better use them than regular broadcasters.

WTMJ Shows FM

WTMJ, Milwaukee, and the Milwaukee Journal were hosts to a group of 85 local engineers, musical and educational fields at a special FM demonstration by WIXAO experimental FM outlet operated by the Journal. With Don Stanley, WIXAO announcer-producer, as master of ceremonies, a program was piped into the WTMJ lounge in the Journal Building.

The card in premiere was devoted to local FM sound effects to dramatize FM staticless reception. A roundabout discussion of frequency allocations was by L. W. Herzog, WTMJ chief manager, who welcomed guests and gave an expository talk. The demonstration was conducted under the technical supervision of Dan Gallerup, technical head of the new FM station and WTMJ chief engineer. Re-freshments were served following the demonstration.

Fly Calls for FM Allocation Program

Upon completion of Mr. Levy's testimony, Chairman Fly presented another collogoy by advising FM Broadcasters Counsel Loucks that the Commission was interested in receiving a proposed plan of FM allocation. He questioned the advisability of FM regarding advantages of the system unless a proposed allocation plan was submitted indicating how service would be provided.

Accepting the Commission must weigh the advantages and deficiencies of such a plan, Dr. Levy said that the Commission was interested in receiving a proposed plan of FM allocation. He repeated that the Commission expected Broadcasters Counsel to submit the plan promptly.

The entire subject of allocation, Mr. Loucks responded, would be discussed with the Broadcasters Counsel Network technical director, and key engineering witness for FM allocation. He added, however, that actual drafting of a proposed allocation plan was difficult since FM is in the position of asking for additional channels and that any plan submitted could not conceivably take into account the many variables involved, such as size of...
of communities and propagation characteristics. He pointed out that his group did propose to offer detailed allocation testimony, particularly since the chief inherent virtue of FM is flexibility of allocation.

"So your answer is no!" observed Chairman Fly.

Mr. Loucks said it was not exactly "no" but that some understood it a little better. He added that the allocation chart, as to the nature of the allocation chart. Chairman Fly suggested that perhaps in this case it was not a bad thing unless such data were provided. He added he did not want any surprise expressed on the part of FM broadcasters during the hearing, when the demand is made for the sample allocation.

Mr. Weir, as counsel for Maj. Armstrong, asked it should be made to draw up a plan but suggested it could be handled because it did not know how many frequencies to work into the structure. Chairman Fly did not care about the details but thought it logical to take into account the demands of FM Broad- casters.

Mr. Wozenwartz, for RCA, asserted it had the group with a partial allocation plan drafted when his witnesses presented direct testimony. Mr. Fly was willing that the Commission approve and receive several plans.

In the ensuing discussion, Mr. Loucks raised the question of FM Broadcasters to attempt to show the efficiency of the system but would that the group for the group to undertake a sample allocation in which ten stations might be placed in a lesser number in another city of comparable size. To this the Chairman replied that the group was handicapped by a "plan of allocation which demonstrates the efficiencies of FM broadcast- ing and.FM. It was thought, could translate into a scheme of allocation so far as it would be acceptable and applicable.

Weir Tells of Tests

By General Electric

Further testimony on the superior- ity of FM over AM transmission was given by I. R. Weir, radio engineer of GE, who outlined the results of experimental frequencies and reception both by automobile and plane. GE first conducted comparative tests of two-set watt transmis- sion, one using AM and the other FM, and these preliminary experi- ments in the New York area. Of FM, he declared, using the trans- mitters from exact locations. He said that to have a 50% greater signal than AM under such conditions.

Describing airplane tests, Mr. W was said that the FM signal was received at a distance of 75 miles from the transmitter with AM and 11 miles from the high frequency signals picked up at an altitude of 4,000 feet.

Some other tests, involving signal-to-noise ratios, FM appeared better than AM all the down line, he declared, that receivers of FM stations beyond the line of sight, he declared that an average of 20% better. An acceptable signal was received ap- peared to be about seven miles be- yond the 117-mile reception limit on FM. He described an area of sharp tradition to another operating on the same frequency with FM, when received on an auto set while traveling. At no time did he declare that frequencies heard simultaneously, he declared, and there was no hetero- dynes interference. The hearing were recessed March 21 until March 25.

Discrimination in Signals Is Cited

Mr. Weir concluded his discus- sion during the airplane tests, he related, on March 25. Continuing his de- scription of the airplane, he described, that was observed immediately above the stations' vertical antennas, due to a region of zero propagation at these points. Although the Sche- nectady station, W2XDA, could not be heard immediately after FM was observed, signals from W2XOY at Albany were received at this spot.

This illustration "FM discrimination," he remarked, agreeing with Chairman Fly's observation that while a strong FM signal skips over a weaker one, FM signal becomes receivable again when the weaker signal is removed. In other words, if the frequency was observed, with a near-by FM transmitter, the receiver was capable of receiving the two signals.

Weir Cross-examined by Mr. Jett, for the FCC, and by RCA Counsel Wozenwartz, Mr. Weir supplied supplementary data on con- struction and equipment of the two FM stations and various phases of the test and his diagram. Respond- ing to a question by Mr. Wozencraft, he agreed that the airplane and auto tests were "typical" of present tests.

Advantage Claimed

In Noise Factor

Explaning the remaining sec- tions of the technical exhibit set forth findings of the GE tests, Henry P. Thomas, GE radio engi- neer, took the stand. Describing tests conducted by himself under conditions similar to those of the test, he declared that tests of signal-plus- noise-to-noise ratio indicated that FM had an advantage over AM of from 15 to 20 db. Tests employing several listeners, with listeners fixating an FM signal and then tell- ing transmitting transmitters to transmit power on AM transmission until a comparable FM was avail- able. That a 50-to-1 power ratio was needed for the FM signal to approximate the AM, he said. Further tests indicated that in AM reception interfer- ence resulting from an FM sig- nal was less than another AM sig- nal, since the power of the FM signal was steady, with modulation in frequency rather than pow- er, he said.

Following a conference between FCC counsel and representatives of the FCC, Mr. Weir was engaged in a conference with Mr. Wozencraft, after the airplane and auto tests were "typical" of the tests.

The following conference was held at the request of Chairman Fly in the interest of expediting the proceeding.

THEY SHALL NOT PASS television" might have been the thought of these "opposition" counsel, who oppose allocation of any frequencies now assigned television in favor of FM. Left to right are Dr. C. B. Jolliffe, former chief engineer of the Federal Communications Commission. Chairman Fly, R. R. Beal, RCA patent research director; Frank W. Wozenwartz, RCA chief engineer; Paul A. Porter, CBS Washington counsel.

LIGHTNING TEST

Proves FM Immune to Bolts, According to GE

TO PROVE the ability of FM to operate practically free from static under the most, trying conditions, Dr. W. R. G. Baker, manager of the General Electric Co., radio and tele- vision department on March 25 de- scribed a series of tests.

A million-volt continuing arc of "man-made lightning", created only a few feet away from an FM set while it was bringing in a program, sufficed to prove the ears of the present at the test. The FM set was practically immune to elec- trical interference, the bane of ordi- nary receivers, according to a state- ment by GE.

To add "eye proof" to ear previ- ous, a series of tests was described in which a cathode-ray oscillograph produced graphic evi- dence of the same kind of perfor- mance on a smaller scale. Dr. Baker submitted photographs of the oscillograms made in the GE research laboratory in Schenectady. The actual lightning test was con- ducted in the Great Airship barn at the New York World's Fair.

Putting the "streamlining" agreement into effect, Counsel Loucks called as his final witness for FM broadcasters Paul A. Mc- deMars, technical director of Yan- kee Network and technical advis- or for the FM group. Punctuated by lively questioning, led by Chair- man Fly and Commissioner Crav- en, Mr. deMars discussed a series of tests involving limited access to radi- us FM operations, along with another including recommended- allocations. Testimony included exam- ples allocations on a country-wide and sectional basis, as requested by Chairman Fly.

Mr. deMars' first exhibit was a graphic portrayal of field inten- sity measurements along selected FM station lines, at W2XMN, at Alpine, N. J., adjusted to a re- ceiving antenna height of 30 feet and including factors of topog- raphy. The second presented tabu- lations of relative service areas of stations operating on 200, 100, and 40 kc bands. It showed that with a peak swing of 75% of bandwidth available to adjacent channels with same power a 200 kc. station would have a 100-mile service ra- dio, while a 400-mile station with same power a 200 kc. station would have only an 83-mile service radius and a 21,600 square mile area, an 84 miles and 13,230 square miles. It indicated also that to achieve an interwoven performance of 5:1, a 200 kc. station on the same channel must be 330 miles separated, 100-kc. stations 400 miles with 4 to 1 power ratio, and 40-kc. stations 520 miles with a 25 to 1 power ratio. On adjacent channels it was shown that 330 miles separation to achieve an interwoven performance is necessary.

Radiating Efficiency

Of Transmitter Shown

The three other exhibits in the group graphically represented co- channel operation of stations from an allocation viewpoint, showing propagation at 40-60 kc. wavelengths, based on field intensi- ties at varying distances from the transmitter and consumer ac- tivity. In his illustrations in these exhibits Mr. deMars employed in a series of calculations and on the definite transmission factors from the transmitter, he described as a combination of power, antenna height and power gain in antenna. The maximum allocation recom- mended by Mr. deMars encompassed FM stations operating in the 40-60 kc. band with 4,000 watts or greater power. The minimum transmission from the transmitter, he described as a combination of power, antenna height and power gain in antenna. The maximum allocation recom- mended by Mr. deMars encompassed FM stations operating in the 40-60 kc. band with 4,000 watts or greater power. The minimum transmission from the transmitter, he described as a combination of power, antenna height and power gain in antenna. The maximum allocation recom- mended by Mr. deMars encompassed FM stations operating in the 40-60 kc. band with 4,000 watts or greater power. The minimum transmission from the transmitter, he described as a combination of power, antenna height and power gain in antenna. The maximum allocation recom- mended by Mr. deMars encompassed FM stations operating in the 40-60 kc. band with 4,000 watts or greater power.
A glance tells you that. Our performance figures on this new G-E 250-watt F-M transmitter tell much more — tell, for example, that when you turn to F-M, you, your audience, your engineers, and your budget will all agree to go G-E.

Call the nearest G-E sales office, or write direct to General Electric, Radio and Television Dept., Schenectady, N. Y.
serving smaller communities, and that no minimum limit of separa-
tion of either Class I or Class III stations be imposed in order to
teach a correspondingly flexible service.

Accompanying this outline of "allocation principles" was a series of four maps presenting sample allocations. On the central divider of the exhibit, one map encompassed the use of six 200-kw. channels, with cities and metropolitan areas of 250,000 or more population served by 40 FM stations having an RE of 5,000 or better.

**Streis Varnish**

The other three covered only the Middle Atlantic-New England area. The proposed allocation provided for three Class I stations, [50 kw.] each, using a separate channel, serving the Washington-Baltimore-New York and Boston-Providence-Worcester - Springfield - Hartford metropolitan areas. Asked if continuous applications for new services might be made in this area, the FCC had indicated a large number of Class III stations [500 to 5,000 watts] stations operating on four channels.

In advancing these "allocation principles," Mr. deMars cautioned that they amounted merely to a "recommendation, and not the only one, believed to reflect sound views and principles of allocation". He stated that the FCC had not defined FM Broadasters advocated three types of stations or only three types of service.

Queried by Chairman Fly and Commissioner Craven on why a 200-kc. channel was so desirable, Mr. deMars replied that it would provide the greatest service over a wide area with the greatest flexibility. Asked if it would not mean FM Broadasters would have to be made in a receiver design to make narrower channels any more desirable. The advantages of channel width lie in flexibility and not in equipment construction, he declared.

The question from Commissioner Craven he answered that although, accepting high-fidelity merely as transmission of wide range, a range of 18,000 cycles can be made on a 100 kc. band, a power increase of 200 kw. would be necessary to secure the same standing as the wide band. The "improvement factor" in FM, he said has no counterpart in AM. Much of the detail was not in equipment construction, he declared.

**Press Is Interested**

DEVELOPMENT of frequency modulation, which already has brought a surge of applications, is expected to develop an outpouring of requests for facilities from leading New York newspapers, it was indicated at the hearings before the FCC. One of the major papers which does not have any of its important facilities in the New York metropolitan area, it was pointed out that the map showed Class III stations located in smaller cities, such as Newark, to give supplementary local service. Inasmuch as FM is a relatively new service, it might be made from an engineering standpoint, probably would prove "more satisfactory than AM", he said.

Asked by Commissioner Craven whether narrowing the band to 100 kw. would amount to yielding "more stations and less quality", Mr. deMars answered that it would allow putting in a larger number of interfering stations resulting in less service to the public.

Cross-examined by Mr. Jett, he explained that a 50-kc. guard band in the 200 kc. channel is necessary because the ideal electrical circuit cannot be compounded to eliminate this protective factor. Based on full operation, he estimated the RE of W2XWM, Alpine, New York, at 5,000 and that of W1XOJ, Paxton, at 20,000, in the latter case assuming a 5,000-foot antenna elevation. He pointed out that in the case of W1XOJ the antenna height toward Boston amounts to about 1,500, whereas at Paxton where average elevation runs from 800 to 900 feet, the actual elevation is only 600 feet. The face of this signal propagation in that direction.

**Providing Coverage For Economic Areas**

This discussion precipitated a brief colloquy on the suitability of "rural outlying areas". The FCC indicated a technical term to be applied as a common denominator in speaking of FM. On the other hand, Mr. deMars was not convinced that the term "rural" was applicable. He added that economic areas would be a more satisfactory signal-to-noise ratio, in practical operation it costs the operator no more than vertical polarization, he added that horizontal polarization "in no way whatsoever" compromises receiver design.

Returning momentarily to the relative desirability of various ultratransmitters and the higher frequencies are suitable for services of limited coverage, and that forcing of FM upward would curtail the widespread shown as attainable with FM.

RCA Counsel Wazen developed some length on cross-examination, particularly on the comparative merits of the band FM and AM transmission. Although a 5 microvolt-per-meter signal may amount to good service under certain conditions, where man-made interference and set noise is low—the number of people who will hear a signal would be small, he commented.

Mr. Wazen was asked what was the "quality of reception" depended on, noise range, frequency range, dynamic range, harmonic distortion and FM. From Mr. deMars' point of view, the comparative answers Mr. Wazen developed that the difference of 300-400 kc. reception lies in the amount of noise, the dynamic range because of the ease of measurement, and in a measure phase distortion.

**Urges Uniformity In Station Separation**

Applying these observations, Mr. Wazen asked whether the reception at a point 50 miles distant could be expected from a 5,000 kw. station in the "middle of Boston Common." Operating on 200 kc., good reception would result. Distortion and while on 100 kc. reception still would be "good", but susceptible to interference from stations. However, if the signal-to-noise ratio would begin to deteriorate, probably dropping from 70 db. to 60 db. Further cross-examination revealing the views on his part. Mr. Wazen next asked that despite this, such reception would be possible and that provision service and could be called "good".

Referring to the sample allocations, Mr. Wazen emphasized that the station separations mentioned were not "recommendations", only those separations when the frequency was decided upon, he added, it should be the same for all stations.

Although Hartford and Providence could be served satisfactorily by a 200-kc. station such as W1XOJ, 40 miles distant, a 100-kc. station

**Chairman Fly's observation that applicants should consider not only the economic areas, also neighboring areas, and then set out to establish a station that will give this service to the whole area, rather than go into the proposition with the idea of just setting the station in a particular city, letting the service area question work itself out.**

Speaking of the relative merits of horizontal and vertical polarization of signals, he commented that while horizontal polarization is definitely a more satisfactory signal-to-noise ratio, in practical operation it costs the operator no more than vertical polarization, he added that horizontal polarization "in no way whatsoever" compromises receiver design.

**Chairman Fly's observation that applicants should consider not only the economic areas, also neighboring areas, and then set out to establish a station that will give this service to the whole area, rather than go into the proposition with the idea of just setting the station in a particular city, letting the service area question work itself out.**
could serve the cities neither so satisfactorily nor economically, as power would have to be increased, he said. He continued that while he was not necessarily recommending more than one station in any one city, he did foresee more than one in a single city, with the types of stations dependent on economic considerations as well as service requirements.

Asked for a "guess" on the number of channels needed for a country-wide service, Mr. Finch estimated that 30 or 40 FM channels would permit a service for the whole United States, if Class I or to present service. He suggested a channel ratio, based on three types of stations, Class III to 2 Class II to 5 Class I.

If asked if it would be practical to allow Class I and Class II operation in the 40's and push Class III up into the 100-120 mc. band, he said it would not be because of the necessity of minimizing the effect of terrain. The higher frequencies are not as efficient in doing this, he explained. As between the various classes of stations, it would make little difference which one was used, he continued, but he still holds that the higher frequency operation would cover a smaller area. He added that receivers for the higher-frequency transmission would cost more.

**Directive Antennas Would Add Stations**

From a practical standpoint, he explained to Commissioner Craven, by using directive antennas more stations could be placed in a given area than could be plotted geometrically purely on a basis of necessary separations.

Diverted momentarily into the television field, Mr. deMars commented, "Television is a great engineering achievement, but a misfit in its present position in the band". It will necessarily go to higher frequencies and employ FM in a wider band, he commented, declaring there was "no question" that the advantages of FM would be apparent visually as well as to aural transmission.

Concluding, he stated in response to questioning concerning the possibility that channel width of 8 to 10 mc. was being used in point-to-point video relay and that a similar channel probably would be used in other television transmission via FM.

**Finch in Favor Of 200-kc. Channels**

Appearing as counsel for W. G. H. Finch, pioneer facsimile inventor

**Operation of Multiplex**

**At FM Field Laboratory**

**Demonstrated by Finch**

**ACTUAL demonstration of how facsimile can be multiplexed on an FM station without interfering with music being broadcast at the same time** was featured by W. G. H. Finch, president of the Finch Broadcasting Laboratories, at the Shoreham Hotel in Washington during the FM consultant's presentation. Mr. Finch, formerly assistant chief engineer of the FCC, has built an extremely compact facsimile transmitter for checking on FM transmissions. This he operates in addition to a 1,000-watt fixed station in New York City.

In his trailer, situated under a cab and the size of a small kitchen cabinet, Mr. Finch has a 250-watt FM transmitter, WFX. In the coupe which draws the trailer is a 50-watt FM transmitter which can be taken out for even more portable testing.

In this demonstration he set up an FM receiver in the hotel, connected to which was a loudspeaker and one of his facsimile machines. The receiver was a record turntable and pickup alongside a facsimile pickup and scanning unit. A record was played and a crossword puzzle transmitted. Listening inside the hotel the music came through without the slightest sound of interference. With such quiet reception any cutting in by the facsimile system would have been very apparent. A check on the picture transmitted showed that it maintained the same quality as another print sent without music.

Mr. Finch confirms the testimony given at the hearings by Maj. Armstrong and the engineers of FM Broadcasters Inc., and pointed out that a facsimile feature could be added to FM broadcast station without interfering with station operation.

**Finch in Favor Of 200-kc. Channels**

Appearing as counsel for W. G. H. Finch, pioneer facsimile inventor

**Operation of Multiplex**

**At FM Field Laboratory**

**Demonstrated by Finch**

**ACTUAL demonstration of how facsimile can be multiplexed on an FM station without interfering with music being broadcast at the same time** was featured by W. G. H. Finch, president of the Finch Broadcasting Laboratories, at the Shoreham Hotel in Washington during the FM consultant's presentation. Mr. Finch, formerly assistant chief engineer of the FCC, has built an extremely compact facsimile transmitter for checking on FM transmissions. This he operates in addition to a 1,000-watt fixed station in New York City.

In his trailer, situated under a cabinet the size of a small kitchen cabinet, Mr. Finch has a 250-watt FM transmitter, WFX. In the coupe which draws the trailer is a 50-watt FM transmitter which can be taken out for even more portable testing.

In this demonstration he set up an FM receiver in the hotel, connected to which was a loudspeaker and one of his facsimile machines. The receiver was a record turntable and pickup alongside a facsimile pickup and scanning unit. A record was played and a crossword puzzle transmitted. Listening inside the hotel the music came through without the slightest sound of interference. With such quiet reception any cutting in by the facsimile system would have been very apparent. A check on the picture transmitted showed that it maintained the same quality as another print sent without music.

Mr. Finch confirms the testimony given at the hearings by Maj. Armstrong and the engineers of FM Broadcasters Inc., and pointed out that a facsimile feature could be added to FM broadcast station without interfering with station operation.

**Wide-band operation is more satisfactory from the standpoint of range, quality, multiplexing and flexibility, he stated, pointing out that once band width is set, channels can be narrowed more easily than they can be widened. FM also will save ether space, he stated, by showing the way to put a large number of stations on the same channel with almost no waste space**.

From the educator's standpoint, as well as from the regular broadcaster's, it would be advantageous to place educational stations on FM channels contiguous to commercial broadcast channels, he observed. Since modulation efficiency runs lower on higher frequencies, FM could make better use of frequencies in the 40's than television, he added.

**Bailey Reviews Multiplexing Tests**

Stuart L. Bailey, of the Washington consulting engineer firm, Janesky & Bailey, licensedes on W2XO, briefly described the technical operation of the station, with emphasis on its multiplexing experiments and how they can be widened. FM also will save ether space, he stated, by showing the way to put a large number of stations on the same channel with almost no waste space**.

From the educator's standpoint, as well as from the regular broadcaster's, it would be advantageous to place educational stations on FM channels contiguous to commercial broadcast channels, he observed. Since modulation efficiency runs lower on higher frequencies, FM could make better use of frequencies in the 40's than television, he added.

**Wide-band operation is more satisfactory from the standpoint of range, quality, multiplexing and flexibility, he stated, pointing out that once band width is set, channels can be narrowed more easily than they can be widened. FM also will save ether space, he stated, by showing the way to put a large number of stations on the same channel with almost no waste space**.

Here in the 18th Industrial Area of the United States, WTAG has had primary coverage with 1000 Watts. With 5000 Watts your daytime program gives you wider and better coverage, and better reception. WTAG is the vital station in Massachusetts and in New England.

**1000 WATTS AT NIGHT**

**WTAG—WORCESTER, MASS.**

**NBC BASIC RED AND YANKEE NETWORKS**

**EDWARD PETRY & CO., INC.—NATIONAL REPRESENTATIVE**

**OWNED AND OPERATED BY THE WORCESTER TELEGRAM-GAZETTE**

April 1, 1940 • Page 89
Radioype Multiplexing

Outlined by Lemmon

Walter S. Lemmon, representing International<br>Radioype Multiplexing, general manager of its Radioype Division, testified briefly, describing the possibilities of FM in developing Radioype as a "special class of facsimile." Under questioning by Counsel M. Stokowski, Lemmon stated that Radioype's application to broadcasting purposes included transmitting FM sound, both home and<br>and via large-screen projection to large crowds. He also briefly described demonstrations of Radioype multiplexing conducted in Washington in cooperation with Jacky & Brown, W2XCN.

Mr. Lemmon warned against definitely tuning up frequencies "too far" in advance, allowing adequate holding frequencies above 100 kc. open for experimental purposes. When this recommendation was initially made, Lemmon explained, point-to-point operation of Radioype was in mind, while now general broadcast via FM multiplex is envisioned. He added that "with some encouragement," such as making the commercially available FM equipment "enough," the IBM would develop a simplified Radioype machine suited for home use. In closing the March 26 session, Chairman FyI commented that "no substantial changes" had been made on the interests of educational stations, and pointed out that it would expedite matters if representatives of educational leaders met, meanwhile and presented their composite case through a single representative.

Catchings Sees
Advantages for Musak

Waddill Catchings, president of Musak Corp. and Wired Radio and chairman of the board of Associated Music Publishers, opened the March 27 session. Stating that Musak now serves some 600 establishments and 1,000 homes via wire lines, he said FM seemed to be a means of supplying Musak service at lower cost than traditional radio. Its economy feature, he continued, FM also affords the additional advantage of improved coverage over a wider total range than wires. Observing that present wire operators are serving a maximum transmission of about 9,000 cycles, and that whenever reception drops to as low as 6,000 cycles customers are quick to complain, he stated Musak's experience has shown that "the public wants a truly faithful reproduction of music." This attitude has been borne out also in several FM stations conducted by the organization, he added.

According to a magazine article by Leopold Stokowsky, well-known symphony conductor, he developed Mr. Stokowski's statement that at least 13,000-cycle transmission is necessary to reproduce "great music." With the average ear capable of reproducing no greater maximum, he declared, the same rule holds for popular music and dance music.

There is a general demand by the public for both high quality and high fidelity in music, entertainment, he emphasized, and "whether operated individually or through relays FM stations using transcriptions can supply a non-commercial service than standard stations are getting their programs over wire lines. He pointed out also that Musak wires, which are the best available, although affording better reproduction than broadcast and<br>cast stations, are far behind FM transmission.

The scheduled appearances for WSM, Nashville, and Carmen R. Runyon Jr., licensee of W2XAX, Yokners, N.Y., were in favor of brief statements by counsel. Both endorsed the general stand of FM Broadcasters and Maj. Armstrong.

Wozencraft Sees
High Frequency Ready

In a preliminary statement at the opening of the March 27 session, Counsel Wozencraft stated that the presentation would be "cut to the bone" in the interest of expediting the proceeding. He also announced that since the question of television allocations had been drawn into the FM considerations, he would call Elmer W. Engstrom, in charge of RCA television research.

Announcing RCA's stand, which up to this point had been of conjecture, Mr. Wozencraft de-clared, "RCA believes the companies believe that ultra-high frequency broadcasting is ready for commercial use. It is our conclusion that ultra-high frequency broadcasting when sound alone is broadcast should be modulated because of technical advantages and that the time has arrived when ultra-high frequency sound broadcasting should be presented to the public as a regular service.

Although FM's future cannot be predicted, he continued, with FM competing with standard band broadcasting "only the public can determine which the public will prefer and for which it is willing to pay through the purchase of new receiving sets." Going into foreseeable facts, he said it appeared certain there never will be a time when the entire country can be served by ultra-high frequency broadcasting, and that "welding networks" and adding sight to sound "will be difficult tasks." Receiving sets, he added, "until the public welcomes FM enthusiastically, it will be many years before all the listeners anywhere will have purchased FM receivers, he added.

The transition standard band broadcasting must be maintained, he pointed out, commenting that "ultra-high frequency broad-casting offers a technical improvement in the broadcasting service for which the public must ultimately pay." Concluding, he declared, "We believe that the public interest will best be served by Commission action giving frequency modulation a green light.

Beverage Explains
Noise Characteristics

The first RCA witness called by Mr. Wozencraft was H. H. Bever-age, RCA Communications chief relay engineer, who explained the so-called Beverage shortwave antenna for trans-oceanic broadcasting. Mr. Beverage explained a series of six technical exhibits covering propagation and noise characteristics as determined in RCA tests of transmission in the 40-50 kc bands.

In a discussion of the comparison between FM on narrow and wide bands, Mr. Beverage stressed the importance of taking into consideration the "threshold", where he explained, noise peaks of equal signal peaks. In order to get the full benefit of any swing, whether it be 100% or 200%, he commented, the carrier-to-noise ratio must be 2 to 1. Continuing,

he explained that as channel width narrows, the threshold moves out, thus increasing the signal advantage, and as the channel widens, if the transmission continues to decreased noise, he stated — increasing the frequency swing, improved signal-to-noise ratio or increasing antenna efficiency.

Propogation Traits
Are Cited by Guy

Following Mr. Beverage to the stand, Raymond F. Guy, NBC radio facilities engineer, described the tests conducted through W2XAX and W3XW transmitter in the Empire State Bldg., and a receiving station at Belmore, L. I. For each FM experiment tests were run to determine just what use might be made of FM in the broadcast field, which began in the summer of 1939, he estimated cost about $20,000 "out of pocket." Of an exhibit introduced by Mr. Guy indicated comparative propagation characteristics of narrow-band and wide-band FM. According to the exhibit, a 50 db. signal-to-noise ratio, rated as excellent in the test, was attained at a distance of 88 miles with an FM deviation of 75 kc. (equivalent to the 200-kc. long wave band), 15 kc. miles with an FM deviation of 15 kc. and at only 40 miles with AM. To do this, he said, the RCA licen-se laboratories, was the next witness called by Mr. Wozencraft. Through a series of technical exhibits he analyzed phenomena leading to FM set construction problems. He also introduced a table showing the number of AM and FM receivers. Explaining this table, he commented that two types of FM sets were used, one type designed for minimum performance and another for maximum performance, both types running the complete price range.

The table indicated that an FM receiver comparable in class to present sets selling for $19.95 would sell for about $27 if designed for minimum performance and about $30, designed for maximum performance. Such a set, he commented, would not yield high-fidelity transcription - which should probably be from 100 to 10,000 cycles. FM receivers, he added, would not start below $140, and in compara-tive price would approximate present field AM sets, stated. In the upper brackets, a set equivalent to a $200 AM receiver would cost $200, giving maximum performance, according to the table.

Specimen Allocations
Explained by Lent

Conclusions stemming from the preceding RCA testimony were presented by Worthington C. Lent, NBC allocators engineer. High power broadcasting facilities, he said, illustrated graphically by maps and charts, was a series of four specimen allocations, each covering a section of the eastern half of the country. Each allocation was based on a different FM transmission situation. Three of the 40-kc. narrow-band channel to the 200-kc. wide-band channel advocated under the Armstrong system.

Stating RCA's conclusions, Mr. Lent declared the maximum service available in the metropolitan area is a channel deviation of about 33 kc. (a swing of 66 kc.), and the increase of serv-
ice radius with 33 kc. maximum deviation is about 10% greater than that obtained with a 15 kc. maximum deviation. Higher radius factors than 33 kc yield smaller service radii, he continued, and a maximum deviation of 90 kc. (using a 200 kc. band) yields a service radius approximately equal to that obtained with a 15 kc. maximum deviation.

Regardless of deviation, the required separation distance between stations operating on the same channel is essentially constant, he declared, and since the ability to allocate is in general measured by the separation distance required, the net effect of increasing maximum deviation above 15 kc. is a constant increasing loss in the number of channels available in a given band without any gain in the ability to allocate.

He pointed out that since the "bottleneck" in allocation lies in the geographical distribution of points along the Eastern seaboard, a minimum of 11 channels is required to provide one facility in each of approximately 64 metropolitan areas east of the Mississippi, regardless of the maximum deviation used, if a single system is used. To permit complete allocation in these areas, he estimated that an additional 11 channels would be necessary.

Western Half

Offers Few Problems

Supplementing his figures with reference to the series of individual maps, he stated that by using 40 kc. channels with 15 kc. maximum deviation systems, six facilities could be furnished each of 64 metropolitan areas east of the Mississippi with nine channels in each of 15 areas, with 10 channels left over; two facilities can be furnished in each of 64 areas, with four channels to spare, he continued, and using 140 kc. channels with 90 kc. maximum deviation systems, one facility can be furnished each of 66 metropolitan areas, with four channels to spare.

He explained that the maps treated only of allocations for areas east of the Mississippi because once a allocation scheme could be worked out for this half of the country, "the bottleneck", there would be no comparable problem; making allocations for the west'n half. In view of the population in the east, he pointed it, the allocation problem is one of adjacent channel interference, of not co-channel separation.

Asked why RCA employed a 180 kc. swing in its 200 kc. band calculations, rather than the 150 kc. swing with a 50 kc. guard band of the "complete system" method, Mr. Lent declared that he thought 50 kc. was too much, and a 10 kc. guard band on either side was "plenty" to protect adjacent channel interference. This wider deviation would provide only for aural signals on a 200 kc. band in 1950, and would allow no room for facsimile or other services.

Otto S. Schirer, RCA vice-president in charge of patents, followed Mr. Lent to the stand. He was questioned with respect to the work of FCC Attorney Bauer about supplemental information offered in connection with a previously filed report on RCA present holdings touching the FM field.

stromberg-carlson

Set Sales Analyzed

Mr. Loucks read into the record a brief statement on behalf of Stromberg-Carlson which included figures on FM receiver sales by that company. The statement said that from Oct. 14, 1939, to March 2, 1940, the firm had shipped a total of 1,158 sets. This included 467 sets selling at $55.50; 379 at $149.50; 51 at $179.50; 172 at $275, and 262 at $355. All these sets were built for operation under the Armstrong system, he stated.

Mr. Lohnes concluded the session with a brief appearance on behalf of WDRF, Hartford, and Westinghouse E. & M. Co., offering no testimony for either beyond formality filing for the record a Westinghouse exhibit describing its FM experiments. The exhibit indicated endorsement by Westinghouse of the FM Broadcaster's-Armstrong stand.

RCA Demonstrates

Signal-to-Noise Ratios

RCA picked up its presentation March 25, concluding at the noon recess, stating in its total demonstration to a single recording, RCA presented a transcription offering aural comparisons between 20, 30, 40, 50 and 60-db. signal-to-noise ratios. The demonstration drew intensive questioning from the FCC members, who showed particular interest in the disparity, from a standpoint of noise, between the 40-db. signal, classed as the minimum acceptable signal by RCA, and the 60-db. signal, classed as excellent.

Recalled for cross-examination, Mr. Lent further interpreted his exhibit covering comparable channel widths between various frequency swings. In a colloquy with Commissioner Thompson, during which the commissioner took issue with certain allocation factors in the RCA exhibits, Mr. Lent declared that although a particular facility could be allocated to a city of 10,000, its actual needs and ability to support must be taken into consideration, but there is no sense in giving it more service than can be used efficiently. He explained that this did not mean that the program service desires of the community should be disregarded.

Responding to a query by Commissioner Brown, he stated that although rural areas would necessarily be served by the standard band, at least in the present state of the FM art and until a method is found of extending u.h.f. coverage, in some cases rural sections contiguous to FM service areas probably would get better service under FM, particularly where the effect of ground conductivity on AM is marked. As for smaller cities and population areas, he continued, all probably could have a station, if necessary, by limiting surrounding service areas. Although a single facility probably could be given to all cities above 10,000 population by restricting service areas, if the competitive factor were to be introduced by allowing more than one station to each city, more channels would be necessary, he stated.

A Choice of Frequency

Space or Coverage Gain

The FCC must decide which is more valuable, frequency space or coverage gain, Mr. Lent declared. In connection with his discussion of signal-to-noise ratios in this respect, Lje.t. Jett cited the propagation characteristics of the two General Electric FM transmitters at Schenectady and Albany, located about 15 miles apart, and asked if their 200-kc. operation could be duplicated using the 30-kc. deviation recommended by Mr. Lent. The latter answered that it could be done, but that the 30-kc. deviation operation would yield a larger "no man's land".

After an explanation by Mr. Lent that his FM calculations were based on a study started about 18 months ago, with working figures resulting from operation of RCA's experimental transmitter and receiving station at Belmore, Mr. Loucks took issue with RCA for basing its allocation suggestions on observations of "one day in one month on one station in one area". In response to another query by Mr. Lohnes, Mr. Lent explained that to increase the signal-to-noise
the transmitter conversion would entail extensive tube changes, de-
pendent upon culmination of a new development not due until the last of the year, and would take in all about 15 months.

Comparative Results Of Band Widths

Commissioner Thompson at some length developed the proposition that perhaps it would be worth de-
laying television if, by supplying an additional service via U.H.F., cer-
tain areas now deficient in radio service could be benefited. Mr. Engstrom made no comment on this but pointed out that he was only advancing the engineering aspects of the various services and could not attempt a choice between them.

As the final RCA witness, Mr. Engstrom, in charge of RCA tele-
vision research, discussed the television aspects developed during the hearing, most of which were con-
fined to FM's potential function in television operation and allocation matters. He stated that television have functions effectively in the 40-Mc. band, particularly in giving good
metropolitan service. At the present state of the art television could not be moved bodily into the higher frequencies and maintain equivalent operation without considerable delay, he declared.

If television Channel 2 were turned over to FM operation and the NBC television transmitter, W2XS, moved to Channel II, the switch would take about four months and cost around $100,000, he estimated. However, he added, if television were transferred to another channel above Channel II, he would be able to carry the picture, along with an additional .6 or .75 Mc. for sound, necessitating a total bandwidth of "something under 9 mc." The 750-
kc. guard band employed in television functions to keep the sound signal out of the picture signal, he explained. Narrow-band FM would give better aural service for tele-
vision than AM, he commented, but wide-band operation would necessitate a band several mc. wide.

He said he foresees the use of FM in video, but at much higher frequencies than the present. In this respect, FM could serve as an "elec-

tor", he commented to Chairman Fly, but not necessarily, since it could move into the higher fre-
quencies and still employ AM. However, he is thought to have better possibilities, he added.

 sees Disadvantages In Higher Frequencies

As the final RCA witness, Mr. Engstrom, in charge of RCA tele-
vision research, discussed the television aspects developed during the hearing, most of which were con-
fined to FM's potential function in television operation and allocation matters. He stated that television


could not be moved bodily into the higher frequencies and maintain equivalent operation without considerable delay, he declared.

If television Channel 2 were turned over to FM operation and the NBC television transmitter, W2XS, moved to Channel II, the switch would take about four months and cost around $100,000, he estimated. However, he added, if television were transferred to another channel above Channel II, he would be able to carry the picture, along with an additional .6 or .75 Mc. for sound, necessitating a total bandwidth of "something under 9 mc." The 750-
kc. guard band employed in television functions to keep the sound signal out of the picture signal, he explained. Narrow-band FM would give better aural service for tele-
vision than AM, he commented, but wide-band operation would necessitate a band several mc. wide.

He said he foresees the use of FM in video, but at much higher frequencies than the present. In this respect, FM could serve as an "elec-

tor", he commented to Chairman Fly, but not necessarily, since it could move into the higher fre-
quencies and still employ AM. However, he is thought to have better possibilities, he added.

Mills Produce Dollars in Kansas!

MILLING MONEY NEVER STOPS in Wichita, the principal city in the state that leads the nation in flour milling. Flour makes dough for housewives and smart advertisers alike.

Since you're not a housewife we can skip that part, but if you're thinking of making any dough in the future, let us remind you that "You can't sell Kansas without KFH." And right now, Kansas folks are looking forward to another big year. That means that 392 KFH families in the KFH AIREA are going to have more money to spend, again this year, than the average American family. But you know KFH. It might not be much, but you can get more information (or place your re-


commendation) from Edward Petry & Co. NOW about

that Selling Station for Kansas

K Nox

Knoxville, Tennessee
5000 W. Day—1000 W. Night
CBS—1010 kc.

The Branham Company

BROADCASTING • Broadcast Advertising

Page 92 • April 1, 1940

AN ATTACK of appendicitis caught the late Reverend Millen- 
cial clocker of KYW, Philadelphia, away from his March 16 morning broadcast, but right after the pro-


ogram went blank he rushed to Graduate Hospital for an emergency opera-

tion. Two mornings later he did a masterful job on the hospital bed, aided by Engineer Roy Nuss.

He said he felt the proponents of FM were "a bit on the enthusiastic side" in predicting replacement of present-day broadcasting by FM. Pointing out there are 77,000,000


or more radios in use, he said a large majority of the homes are in the service areas of clear-channel stations which could not procure service with cheap FM receivers. It should be taken into account, he said, that during the last six months of 1938 about 100,000 re-


ceivers were sold each week at $15 or more.

Moreover, he pointed out that high-fidelity reception is not re-


quired generally, since children and other programs other than script shows and that 60% of the daytime program sched-


ules is not adapted to high-fidelity.

Declaring it was apparent from the testimony that FM will not take over all of the AM duties but that it must "cooperate", Mr. How-


land said he felt that introduction of FM will spur manufacturers to produce quality AM receivers for standard broadcast reception and that a good service there by will be developed.

Admitting FM advantages under certain prescribed conditions, Mr. Howland said he felt the medium was too young yet to ascertain whether it is better for the public than television. The public, he said, will make its views known when it has the choice of the two services. He stressed continued experiment-


ation for at least a year for both FM and television before satisfac-


tory allocations are determined. Replying to Commissioner Craven, he urged that the two services should go hand-in-hand at the moment so that the public can make its choice.

Brown Favors Wide-Band System

J. E. Brown, executive engineer of Zenith, presented the results of experiments conducted by his com-


pany with both wide-band and nar-


row-band receivers. His conclusion was that wide-band is the safest course to follow, depicting graphically the technical conclusion reached after spreading experiments.

Replying to Commissioner Craven, he said there are advantages if a compromise could be worked out and that it is found eventually that the band can be narrowed perhaps to 100 kc. it would not render receivers a-


adapted for wide-band operation ob-
solete. He asserted that with 200-ke. bands, there would be no difficulty for fewer stations.

Current prices for FM receivers will be considerably higher now than a year from now, assuming the art is introduced, he estimated, a good receiver costing about $125.

Coverage and Fidelity Compared by Ring

As the only FCC witness, Assistant Chief Engineer A. D. Ring presented the results of field intensity surveys of ultra-high frequency broadcast stations, and in one instance compared distortion with AM stations in the same locality. In substance, Mr. Ring testified that some of the claims to coverage were not as great as these studies indicated. He pointed out the FCC's observations indicated that FM has a directional effect and as a consequence, distortion may be present in certain directions.

Regarding distortion, Mr. Ring compared the results of reception of W3XO, Jansky & Bailey station in Washington, with WRC, using a superheterodyne receiver and two types of FM receivers. Because of the inefficient type of experimental antenna used by W3XO, he said the results indicated substantial coverage. Distortion varied greatly on the two types of FM receivers while on the AM receiver, picking up WRC, the signal appeared as good as the better of the two FM signals. This was attributed largely to the fact that the AM receiver was of exceptional high-fidelity.

Proposed Allocations Are Submitted

Following a recess, Mr. Fly asked comments on precisely what frequency bands were being sought. On behalf of Maj. Armstrong, Mr. Lohnes declared his witness had asked that the bands 41-44 mc. be set aside definitely for wideband FM and that in addition television Channel I ranging from 44-50 kc. be licensed, giving FM a continuous range and thereby simplifying receiver construction.

In this connection, he pointed out, Maj. Armstrong had testified that certain television channels were not being used.

Continuous Lower Band Is Favored

When Chairman Fly asked whether the 78-84 mc. television channel (No. IV) might be assigned for

Ray Dady

sent his 'SIDELIGHTS

from the NEWS'

FM, Maj. Armstrong said it could be used but that it was more logical to use the continuous lower band. Shadows and distortion result on the highest frequencies.

On behalf of FM Broadcasters, Mr. Louchk said his group had gone to considerable trouble to have the lower band 42 to 50 mc., so that the present No. I television band from 50-60 mc., would be lower. He said that the no. I television channel. Moreover, he said his group urged that the present allocation of the continuous channel from 41-42 mc. new being used by only two AM stations, could be avoided for non-commercial FM operation, though FM Broadcasters did not look for assignments in it. Mr. Louchk said his group represents a compromise that had been discussed, pointing out that FM Broadcasters is a trade association and that it takes time to canvass its membership.

 Asked by Chairman Fly what FM Broadcasters proposed in connection with the 20-27 mc. band and the 116-118 mc. band earmarked for FM under existing allocations, Mr. Louchk said his group does not wish to hold the lower band and felt the band above 116 mc. should be reserved for FM operations. All of a苦be of a battle with the educatores was eliminated when Mr. Wozencraft observed that his suggestion for the 41-42 mc. band should be left to the education as long as there is reasonable prospect of the band being used by FM. Maj. Armstrong concurred in the view as did Mr. Louchk on behalf of FM.

Jett Sees Problems in Selecting Bands

When Chairman Fly asked Chief Engineer Jett for his comments, he said it appeared unfortunate that a part of the first television band could not be allotted to FM but that the situation appeared to be one of "all or none". He pointed out there was no way of going below that band while above the desirable portion of the immediate spectrum involved both Government and television had to be considered. Moreover, he pointed out that the problem would become more difficult if the allocation was too low.

Mr. Wozencraft made a plea for a comprehensive study of the respective merits of the 44-50 mc. and 78-84 mc. bands before any conclusion is reached on allocations. Asserting there should be a very complete analysis of the complicated evidence given during the hearing, he said it would be dangerous to hurry the allocations and based on observations of his engineers that the 78-84 mc. band could be used without any undue hardship. Moreover, he pointed out that the Commission might leave the lower television band available for the present visual stations assigned to it in New York, Chicago, Cleveland and Los Angeles, and then perhaps place FM stations on them in other parts of the country. For example, said engineers believed the 44-50 mc. band could be used in Boston and New York without interference.

Asserting that FM and television could well "grow together" and that the No. I television band might be used in the three major cities without disturbing additional FM assignments on them, he declared that if it was taken away now, visual radio would be retared.

Engrasm Recalled For Channel Data

Chairman Fly recalled RCA Engineer Engrasm and enquired whether there would be any substantial loss to television if the No. I channel were assigned FM. The witness observed that while the placement of FM stations on the channel in addition to the television stations would not seriously impede the visual operations, it would not be as good as if the band were available for television all over the country. He said he would like to see television channels No. I and No. II reserved for the larger centers, which would give visual radio two bands below 56 mc. He pointed out that because of separation requirements Channels I, III, V and VII could be used in a city like New York, giving it four stations, whereas if the lower band were taken away only Channels II, IV and VI could be used there.

Kennedy Requests Low Frequency

Zenith Engineer Brown, recalled to be present on television, stated he would not like to see television disturbed since his own company's experiments on the No. I channel would be disrupted. Asked by Commissioner Craven whether he knew of any changes above the No. I and II bands which would give equivalent coverage and service, Mr. Brown said he did not.

Frank M. Kennedy, chief engineer of Don Lee Broadcasting System, licensee of W6XAO, the third station on television channel No. I, was then called, at the suggestion of Attorney Lohnes. Mr. Kennedy said his experience has been that propagation conditions in California require a low frequency and that he believed assigned of the lower band to FM would not be in the best interests of visual radio.

He said that it was possible for the station to operate on the No. I television band but that it was not desirable.

The stormiest period of the eight-day hearing session developed when Mr. Wozencraft asked the Commission to authorize an engineering conference following the hearings to cover the allocations conflict. It was when the RCA counsel used the phrase "snap judgment" and urged the Commission not to use it, that Chairman Fly flew into a narrow-gage. Half rising in his chair, the chairman said the Commission had never "taken snap judgment" but that on the contrary it had exercised caution and that the industry might well do the same. Without making specific reference to the Commission's recent order reopening the television hearings April 5 because of RCA merchandising practices, the chairman said that every since he had been on the Commission, it had given mature consideration to all matters and had not rushed things through. Then he observed that he did not like observations made several times during the hearings about hasty action.

Mr. Wozencraft immediately responded that perhaps he had made an unfortunate choice of language but that he simply wanted to impress upon the Commission the de-
Federal Union Decision Held to Apply to AFM

THE DECISION of Judge Peyton Gordon of the Federal district court for the District of Columbia March 25, holding that labor unions are subject to provisions of the Communications Act, which contain the anti-trust provisions, is not "legitimate," was seen in radio circles as having a possible bearing on the current studies of the Department of Justice generally and more particularly the American Federation of Musicians. In his opinion involving action of the Government against the truck drivers' union of the American Federation of Musicians, Gordon held that where labor unions are subject to the anti-trust laws, there are subject to the penalties of the anti-trust laws.

In the truck drivers' case, the union was charged with a conspiracy involving concrete mixing companies to hire union members of the truck drivers' union rather than members of the operating engineers' union. In connection with the AFM situation, it is understood the Department is conducting studies to ascertain whether it is conflicting, with the law, with a union, and with the regulations, that the anti-trust laws there fixed quotas of musicians irrespective of whether they need them.

CLARENCE H. CALHOUN, Atlanta, Ga., one of the complainants who is identified with Sam Pickard, Atlanta, Ga., an anilinoid manufacturer in the lease operation of WGTN, Atlanta, is affiliated with G. P. Stanley, cotton man of Greeneville, S. C., in an application to the FCC for a new local station of 1500 kw. Catherine S. Moss, also of Atlanta, has applied for a new 220-watt station on 1420 kc. in Macon.

DIATHERMIZER Corp., Los Angeles, Calif., a new radio, which is designed to be used in facial treatment with no anesthesia, has been announced for its European broadcast. A new 220-watt station has been filed with the FCC for license to operate on 4360 kc. and using a transmission of 1 kw. It would be located on Bellevue Turnpike, near Kenney, N. J. (See page 10 for list of other FM applicants since publication of list of licensees and applicants as of March 15 in the March 15 Broadcasting.)

MAGNETIC STORM Stops Shortwave Broadcast From Abroad

LITTLE interference was caused domestic broadcasts by the March 24 magnetic storm which interrupted wire and cable and shortwave communications. Cancellation of several network programs resulted when shortwave transmissions from abroad were marred by the static storm.

A curious feature of the storm was the disabling of AT&T automatic repeater equipment using equipment on transcontinental broadcasting circuits, AT&T remedied the trouble by operating the equipment manually and little disturbance was noted by listeners.

Early shortwave programs on March 24 were not affected, the magnetic field being there untroubled until 11 a.m. CBS received an early broadcast from the Vatican and a news round-up at 9 a.m. The usual news summary by CBS correspondents abroad on The World This Week, 9:30 p.m., failed to come through. In its place, William H. Barton, curator of Haystack Mountain Planetarium, New England Institute, and Dr. H. E. McNish, research expert in terrestrial magnetism of Carnegie Institution, had a two-hour conversation on the astral physical war. The domestic round-up on the last half of the program and NBC cancelled its European broadcast at 3:30 p.m. and 7 p.m. MBS also cancelled foreign programs.

The 8-8:15 a.m. and 8:45-7 p.m. news roundups by CBS foreign correspondents were all cancelled on March 25 and domestic roundups were substituted. By March 26 the European transmissions were coming through again.

AFRA Signs NBC-Hollywood

LOS ANGELES chapter of American Federation of Radio Artists and NBC, Hollywood, announced a new contract covering network staff announcers, for a substantial increase in wages and improved working conditions. Don E. Gilman, NBC western division vice-president, and B. Kernochan, executive secretary of the Los Angeles Chapter, signed the contract.

SECOND anniversary of the WQW Jamboree was celebrated March 25 with the entire Wheeling station participating. To accommodate the studio audience, it was necessary to give three performances in addition to the regular two-hour show at the Wheeling. Hillbilly entertainment and the inquiring Mike constituted the programs.

TIRES SQUARE Productions, new Hollywood motion picture unit, headed by James Moore, has obtained film rights to The First Nighter program, owned by Sales Co., on 50 CBS stations, Friday, 8-9:10 p.m. (EST). The firm plans to make a series of features for major distribution.

BROWN & WILLIAMSON Tobacco Co. (Lavaliere cigarettes) on April 16 will start a 17-week "Sports Reviews," featuring Charlie Grimes, former manager of the Chicago White Sox, on WBHM, Chicago. Russell M. Seide Co., Chicago, is agency.

SUNSPOTS which marred communications March 24 were responsible for the cancellation of the transmission of the studio of CBL, Toronto, from 3:30 to 4:15 p.m. The 29-mile telephone line was out of commission between the Toronto studio and the transmitter at Hornby, Ont.
The LIST of games scheduled by General Mills and affiliated sponsors, as of March 27, with cities, stations, times, and sponsor-ship setup, follows:

Baltimore—WBAM, Lee Davis, home and away games except Sundays and holidays of Browns. Co-sponsored by General Mills and Atlantic Refining Co.

Brooklyn—WOR, Red Barber and Al Rosen, home and away games except Sunday and holiday games of Dodgers, co-sponsored by General Mills and Fruder & Gamble Co.

KANSAS CITY—KCKN and WREN, Walt Lockman, home and away games except Sunday and holiday games of Blues, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Springfield—MXCR, Tom Kelly, minimum of 65 night games of local West End Bears, presented May 1, sponsored by General Mills.

Milwaukee—WISN, Alan Hale, home and away games except first home and home Sunday and holiday games of Brewers, co-sponsored by General Mills and Socony-Vacuum Oil Co.

St. Paul—WTCN, George Higgin, home and away games except first and home and away games except Saints, co-sponsored by General Mills and B. F. Goodrich Co.

Louisville—WEA, Don Hill, home and away games except first home and home and away games except fourth home and away games except Sundays and holiday games of Smokies, co-sponsored by General Mills and B. F. Goodrich Co.

Quincy—WTAD, Bob Lee, home games of St. Louis Cardinals and Browns, sponsored by General Mills.

Wichita—KFW, Kansas City, home and away games except 24 home and away games except Kansas City, co-sponsored by General Mills and Socony-Vacuum Oil Co.

San Antonio—KABC, Dave Young, home and away games of Wranglers, co-sponsored by General Mills and B. F. Goodrich Co.

Indianapolis—WIRE, El Prough, home and away games except first home and home Sunday and holiday games of Senoritas, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Columbus—WCOL, announcer un-selected, home and away games except Sundays and holiday games of Red Jackets, co-sponsored by General Mills and Socony-Vacuum Oil Co.

New Orleans—WSRU, announcer un-selected, home and away games except first home and away games except Mondays and Tuesdays, co-sponsored by General Mills.

Michigan—WMMS, Paul Herr, home and away games of Tigers, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Denver—WDBJ, Jack Statteck, 120 games of home and away games of Cubs, home and away games of Browns, a few other major league games, co-sponsored by General Mills and company not yet announced.

Albany—WABT, WOBO, Sherd Hakkin and Greg Mazer, home and away games except Sundays and holidays of Senators, home and away games except Sundays and holidays of Pirates, co-sponsored by General Mills and company not yet selected.

Pittsburgh—KDKA and WWVB, Rosey Rowell, home and away games except Sundays and holidays of Pirates, co-sponsored by General Mills and Atlantic Refining Co.

Dallas—WRB, Charlie Jordan, home and away games of Rebels, co-sponsored by General Mills and producers bottling Co.

Oklahoma City—KNOC, Ed Andrews, home and away games except Sunday and holidays of Indians, co-sponsored by General Mills and company not yet selected.

St. Louis—KMOX, Frank Laux, home games except Sundays and holidays of Cardinals and Browns, co-sponsored by General Mills and Atlantic Refining Oil Co.

Atlanta—WAGA, announcer not yet selected, home and away games of Crack- ers, co-sponsored by General Mills and B. F. Goodrich Co.

Charleston—WBAT, Roy Hodges, schedule not set of Washington Senators, sponsored by General Mills.

BUFFALO—WGR, Ralph Hubbell, home games except Sundays and holidays of Bills, co-sponsored by General Mills and Atlantic Refining Co.

Brooklyn—WOR, Red Barber and Al Rosen, home and away games except Sunday and holiday games of Dodgers, co-sponsored by General Mills and Fruder & Gamble Co.

KANSAS CITY—KCKN and WREN, Walt Lockman, home and away games except Sunday and holiday games of Blues, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Springfield—MXCR, Tom Kelly, minimum of 65 night games of local West End Bears, presented May 1, sponsored by General Mills.

Milwaukee—WISN, Alan Hale, home and away games except first home and home Sunday and holiday games of Brewers, co-sponsored by General Mills and Socony-Vacuum Oil Co.

St. Paul—WTCN, George Higgin, home and away games except first and home and away games except Saints, co-sponsored by General Mills and B. F. Goodrich Co.

Louisville—WEA, Don Hill, home and away games except first home and home and away games except fourth home and away games except Sundays and holiday games of Smokies, co-sponsored by General Mills and B. F. Goodrich Co.

Quincy—WTAD, Bob Lee, home games of St. Louis Cardinals and Browns, sponsored by General Mills.

San Antonio—KABC, Dave Young, home and away games of Wranglers, co-sponsored by General Mills and B. F. Goodrich Co.

Indianapolis—WIRE, El Prough, home and away games except first home and home Sunday and holiday games of Senoritas, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Columbus—WCOL, announcer un-selected, home and away games except Sundays and holiday games of Red Jackets, co-sponsored by General Mills and Socony-Vacuum Oil Co.

New Orleans—WSRU, announcer un-selected, home and away games except Mondays and Tuesdays, co-sponsored by General Mills.

Michigan—WMMS, Paul Herr, home and away games of Tigers, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Denver—WDBJ, Jack Statteck, 120 games of home and away games of Cubs, home and away games of Browns, a few other major league games, co-sponsored by General Mills and company not yet announced.

Albany—WABT, WOBO, Sherd Hakkin and Greg Mazer, home and away games except Sundays and holidays of Senators, home and away games except Sundays and holidays of Pirates, co-sponsored by General Mills and company not yet selected.

Pittsburgh—KDKA and WWVB, Rosey Rowell, home and away games except Sundays and holidays of Pirates, co-sponsored by General Mills and Atlantic Refining Co.

Dallas—WRB, Charlie Jordan, home and away games of Rebels, co-sponsored by General Mills and producers bottling Co.

Oklahoma City—KNOC, Ed Andrews, home and away games except Sunday and holidays of Indians, co-sponsored by General Mills and company not yet selected.

St. Louis—KMOX, Frank Laux, home games except Sundays and holidays of Cardinals and Browns, co-sponsored by General Mills and Atlantic Refining Oil Co.

Atlanta—WAGA, announcer not yet selected, home and away games of Crack- ers, co-sponsored by General Mills and B. F. Goodrich Co.

Charleston—WBAT, Roy Hodges, schedule not set of Washington Senators, sponsored by General Mills.

THE LIST of games scheduled by General Mills and affiliated sponsors, as of March 27, with cities, stations, times, and sponsor-ship setup, follows:

Baltimore—WBAM, Lee Davis, home and away games except Sundays and holidays of Browns. Co-sponsored by General Mills and Atlantic Refining Co.

Brooklyn—WOR, Red Barber and Al Rosen, home and away games except Sunday and holiday games of Dodgers, co-sponsored by General Mills and Fruder & Gamble Co.

KANSAS CITY—KCKN and WREN, Walt Lockman, home and away games except Sunday and holiday games of Blues, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Springfield—MXCR, Tom Kelly, minimum of 65 night games of local West End Bears, presented May 1, sponsored by General Mills.

Milwaukee—WISN, Alan Hale, home and away games except first home and home Sunday and holiday games of Brewers, co-sponsored by General Mills and Socony-Vacuum Oil Co.

St. Paul—WTCN, George Higgin, home and away games except first and home and away games except Saints, co-sponsored by General Mills and B. F. Goodrich Co.

Louisville—WEA, Don Hill, home and away games except first home and home and away games except fourth home and away games except Sundays and holiday games of Smokies, co-sponsored by General Mills and B. F. Goodrich Co.

Quincy—WTAD, Bob Lee, home games of St. Louis Cardinals and Browns, sponsored by General Mills.

San Antonio—KABC, Dave Young, home and away games of Wranglers, co-sponsored by General Mills and B. F. Goodrich Co.

Indianapolis—WIRE, El Prough, home and away games except first home and home Sunday and holiday games of Senoritas, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Columbus—WCOL, announcer un-selected, home and away games except Sundays and holiday games of Red Jackets, co-sponsored by General Mills and Socony-Vacuum Oil Co.

New Orleans—WSRU, announcer un-selected, home and away games except Mondays and Tuesdays, co-sponsored by General Mills.

Michigan—WMMS, Paul Herr, home and away games of Tigers, co-sponsored by General Mills and Socony-Vacuum Oil Co.

Denver—WDBJ, Jack Statteck, 120 games of home and away games of Cubs, home and away games of Browns, a few other major league games, co-sponsored by General Mills and company not yet announced.

Albany—WABT, WOBO, Sherd Hakkin and Greg Mazer, home and away games except Sundays and holidays of Senators, home and away games except Sundays and holidays of Pirates, co-sponsored by General Mills and company not yet selected.

Pittsburgh—KDKA and WWVB, Rosey Rowell, home and away games except Sundays and holidays of Pirates, co-sponsored by General Mills and Atlantic Refining Co.

Dallas—WRB, Charlie Jordan, home and away games of Rebels, co-sponsored by General Mills and producers bottling Co.

Oklahoma City—KNOC, Ed Andrews, home and away games except Sunday and holidays of Indians, co-sponsored by General Mills and company not yet selected.

St. Louis—KMOX, Frank Laux, home games except Sundays and holidays of Cardinals and Browns, co-sponsored by General Mills and Atlantic Refining Oil Co.

Atlanta—WAGA, announcer not yet selected, home and away games of Crack- ers, co-sponsored by General Mills and B. F. Goodrich Co.
For A Big Chunk of Illinois—Use WSOY

ServestheWorld's
BestBets. Great
ersandlivelivestore.
Heath, where
inhabited up 20\%
WSOY
Decatur, Ill.
250 W.
14 hours daily

There is no substitute for experience

GLEN D. GILLET
Consulting Radio Engineer
982 National Press Bldg.
Washington, D. C.

JOHN BARRON
Consulting Radio Engineer
Specializing in Broadcast and
Allocation Engineering
Earle Building, Washington, D. C.
Telephone NAtional 777

A. EARL CULLUM, JR.
Consulting Radio Engineer
2935 North Henderson Avenue
Telephones 3409 and 5-7466
DALLAS, TEXAS

Frequency Measuring
Service
EXACT MEASUREMENTS
ANY HOUR—ANY DAY
R.C.A. Communications, Inc.
66 Broad St., New York, N. Y.

Radio Engineering Consultants
Frequency Monitoring
7134 Main Street
KANSAS CITY, MO.

Prizes for Flies

ST ANCO Inc., New York, during the week March 11-18 promoted an unusual merchandising stunt for Flit on its quarter-hour-transcribed serial program Meet Miss Julia, heard on some 52 stations throughout the country, but centering around WIOD, Miami. The company released 2,001 flies all over Miami, 2,000 marked with silver and one, “Big Butch”, marked with gold. Listeners bringing in the silver-spotted ones with an open can of Flit to WIOD received $5 per fly, but no one succeeded in capturing “Big Butch” worth $600. Mc-Cann-Erickson, New York, will not release the total number of flies brought in, nor will it state at this time whether the stunt will be extended to other markets.

Sigma Delta Chi Adds Radio News for Awards
RAYO news writing has been added to the list of editorial accomplishments for which Sigma Delta Chi, national honor journalism fraternity, will hereafter offer annual service awards. Excellence in general reporting, editing, writing, foreign correspondence and Washington correspondence have been the usual fields in which competition for awards has been considered. Awards consist of a citation accompanied by a suitably engraved

Judges for the competition announced by Elmo Scott Watson, president of the fraternity, are Frederic Williams, Washington Star; Arthur Krock, New York Times; Washington correspondent; Paul Scott Mowrer, Chicago Daily

Luxor Cosmetics Adds

LUXOR Ltd., Chicago, (cosmetics), the last week in March started its quarter-hour, twice-weekly trans-

Red McFarland, Burlesque Box-Show star on WGN, Chicago, and WFTM, Cleveland. On April 2 the schedule will be expanded to in- clude WJR, Detroit. Featured on the programs are Eddie Howard, King of Tin Pan Alley’s Orchestra, and Syd Symonds, Hollywood make-up expert. Lord & Thomas, Chicago, handles the account.

BROADCASTING

CLASSIFIED

Advertisements

Help Wanted and Situations Wanted, 7c per word. All other classi-
fications, 1c per word. Bold face listings, double. BOLD FACE CAPS, triple. Minimum charge $2.00. Count three words for box address. Forms close 10th and 28th of month preceding issues.

Situations Wanted (Continued)

---Continued---

Commercial Manager—Regional local sta-
tions. Exceptional Record.机关 contacts. Employed. Box A763, BROADCASTING.

Continuity writer. announcer—male, 2L Christian, German demerit, married. experienced, free-lance writer, dramatist, university-trained, journalist background, will travel. Box A756, BROADCASTING.


News—Continuity—experienced newscaster distinctive voice. written own script. ability to
continuity, program ideas. Box A759, BROADCASTING.

Young, experienced, top-notch announcer- salesman now employed desires change Would like to work for a local sea-
sonal
broadcasting followed by outside sales. Will attrac-
to
me. Box A755, BROADCASTING.

Production Man—fourteen years' experi-
ence, production, programming, promo-
tion, writing. Employed, wants to make change. Married. Will accept small salary. Box A765, BROADCASTING.

Manager—Young with outstanding back-
ground of experience in all phases of broadcasters and sales. Has wide experience in local and regional advertis-
ing. No objections to anything on your en-
closure will convince you. Affiliated with major network station in key city. Box A757, BROADCASTING.

Employers—We have experienced radio
people in every section of the United States. Let us submit summaries of qualified applicants whose references have been verified. No cost to you through Ni-
terrestrial Employment Bureau in Des Moines, Iowa. Box 1864, Denver, Col.

Agency Radio Director—with proved rec-
ognition in station management, sales, promotio
-creation and production desire to locate with new or established sta-
tion as sales manager. Young (aged 25), specialized in producing sound ideas to sell for local and national advertisers. Sober, industrious, ambitious, personal-ly well employed by nationally known for
specializing in production of radio ear-popping for local and national advertisers. Available on two week's notice. Go anywhere there is a job to be done. Box A751, BROADCASTING.

Wanted to Buy

Two standard make used 78 and 33 1/3 turntables, with or without pickups. If scribe fully. Box A760, BROADCASTING.

Page 96 • April 1, 1940

JANSKY & BAILEY
An Organization of
Qualified Radio Engineers
Dedicated to the
SERVICE OF BROADCASTING
National Press Bldg., Wash., D. C.

McNARY and CHAMBERS
Radio Engineers
National Press Bldg., Nat. 4048
Washington, D. C.

P AUL F. GODLEY
Consulting Radio Engineer
Phones: Montclair (N. J.) 2-7859

PAGE & DAVIS
Consulting Radio Engineers
Munsey Bldg., District 8456
Washington, D. C.

HECTOR R. SKIFTER
Consulting Radio Engineer
FIELD INTENSITY SURVEYS
STATION LOCATION SURVEYS
CUSTOM BUILT EQUIPMENT
SAINT PAUL, MINNESOTA

Martin V. Kiebert, Jr.
Consulting Radio Engineer
associated with Jansky & Bailey
Russ Bldg., San Francisco, Cal.

CLIFFORD YEWDALL
Empire State Bldg.
NEW YORK CITY
An Accounting Service
Particularly Adapted to Radio
HEALTHY and chirpy are these little chicks, nurtured amidst the kilowatts of WLY, Cincinnati, under direction of Ed Mason, farm program director. The 25 downy studio guests are devotees of the Purina line of poultry edibles, for whom Mason announces.

Joint Baseball Sponsors

FOR THE second consecutive year the play-by-play broadcasts of the Cubs and White Sox games on WJJD, Chicago, will be jointly sponsored by Congress Cigar Co., Newark (La Palina cigars), through Marschalk & Pratt, New York; Walgreen Drug Co., Chicago; through J. Walter Thompson Co., Chicago; Gillette Safety Razor Co., Boston, through Maxon Inc., Detroit. Charlie Grinn, former manager of the Cubs, and Lew Fonseca, former manager of the White Sox and new promotional director of the American League, will handle the broadcasts as they did last year.

Deficit of Eight Cents

ARRANGEMENT whereby the city of Camden, N. J., operates WCAM and pays all expenses, in return receiving $20,000 a year from the Mack-Sales Co., which sells all the available broadcasting time, resulted in an 8-cent deficit for the city for 1939 operations, according to Mayer Brunner.

Eno Plans to Add

T. C. ZIO, U. S. Ltd., on April 15 will start a 52-week series of five-minute musical electrical transmissions on WOH, Newark, Monday, Wednesdays and Fridays, 9:50-9:55 a.m., and Thursdays and Saturdays, 4:50-5:00 p.m. Agency in charge is Condon & Currier, New York, which stated that more stations might be added later in April.

A.S.C.A.P. Boost Stirs Industry

(Continued from page 11)

ably be 5%, the same as will be paid by those individual stations with which the Michigan Network competes. Similarly a hookup of two low-powered stations, each of which pays a single 3% rate, would probably be assessed at 5% for the network programs.

Assuming that the A.S.C.A.P. charges are based on the value received from the use of A.S.C.A.P. copyrighted music by the station or network broadcasting such music, Mr. Paine said that if a single major station pays 5% then it is not unreasonable for a national network to pay 7% since it makes much wider use of the music. Although a new plan may seem simple on first inspection, he said, its compilation has taken months and months of study during which the A.S.C.A.P. radio committee went over the records of every station in the country. In addition, he explained, field men made personal calls on 120 stations and discussed in detail with the broadcasters a wide variety of possible licensing plans. Lengthy reports of these conversations were submitted to the committee, he said, and were carefully studied.

Should be Pleaded?

Declaring that approximately 300 of the nation's broadcasters will, under the proposed plan, find their A.S.C.A.P. payments cut in half, and that some 500 broadcasters will pay "substantially the same" as they do now, Mr. Paine said that the broadcasters should be "greatly pleased" with the plan.

ASCAP sought to produce figures to justify its claim that broadcasters should pay additional revenue. Charges and counter-charges developed, with the result that only a matter of hours after A.S.C.A.P.'s proposition, both Tin Pan Alley and the daily and trade press were filled with a babble of conflicting claims.

Mr. Paine, for example, held that 75% of radio programs are composed of music from A.S.C.A.P.'s repertoire, BMI immediately disputed the figures, citing surveys made by NBC and FOC showing that music occupied less than 60% of all broadcast time and indicating that the amount of time devoted to music on the air is decreasing year by year rather than increasing as A.S.C.A.P. contends. BMI denounced as "even more incorrect and misleading" the A.S.C.A.P. claim that music constitutes 70% of the material used in commercial time on the air. Quoting the NBC survey, it said that only 20.7 of all time on sponsored programs was devoted to music.

ASCAP Hearings

MOTION of William Hotz, attorney for the State of Nebraska, for a new trial of the suit to test the constitutionality of the Nebraska anti-A.S.C.A.P. law was heard March 25 by the same three-judge court which in a previous unanimous decision held the law to be unconstitutional. Court has taken the matter under advisement and will hand down a written decision, probably within the near future. Next suit in the chain of actions filed by A.S.C.A.P. to test the constitutionality of the various anti-A.S.C.A.P. state legislation will be held April 15 before a Federal statutory court in Gainesville, Fla. A.S.C.A.P. seeking a permanent injunction against the State's enforcement of the Florida anti-A.S.C.A.P. law, will be represented by Louis D. Frohlich of Schwartz & Frohlich, A.S.C.A.P. counsel.

TELE-PIC Syndicate, New York, reports that KIEL, Eureka, Cal., KSAN, San Francisco, and KUIN, Grants Pass, Ore., have signed for its daily service play making a total of 103 subscriber stations.

**Ethyl Case Seen Supporting Radio in Using Records**

**Bennett Finds Analogies in Supreme Court Opinion**

THE OPINION of the Supreme Court March 25 in the Ethyl Gasoline Corp. case, holding that restrictions imposed upon the use to which an article may be put after it has been purchased in regular channels of commerce is illegal, was construed by legal observers in Washington as directly applicable to performance records over broadcast stations.

Andrew W. Bennett, Washington counsel for independent broadcasters, in a letter March 26 to President Harold A. Laffen of NIB, stated the court in positive terms that in the case of the Ethyl Gasoline formula, the parent company could not control its use through the retailer.

He said the case was analogous to the situation confronted by the broadcasting industry regarding restrictions on performance of phonograph records, and that the opinion should be eventually to clarify that issue. Mr. Bennett last February [Broadcasting March 1] had written the Independent Broadcasters that they could perform phonograph records without paying tribute to various artists seeking compensation if they purchased the records in regular channels of commerce and if they refrained from use of the name of the recording artist or the record manufacturer.

**Rights Relinquished**

The Supreme Court in the gasoline case unanimously held that combinations imposed by Ethyl Corp. on the resale of Ethyl gasoline are illegal. The court said that such contractual restraints on any use of the gasoline are illegal to the extent that they would prevent the resale of Ethyl gasoline to wholesalers who had purchased it from legitimate sources.

**BIRTHDAY felicitations flew thick and fast at KDKA, Pittsburgh, on March 19 when Fort Pitt Brewing Co.'s Tap Time program started its third year on the air. S. D. Gregory, KDKA general manager, during the observance, presented to Sponsor Mike Berardino a mammoth birthday cake decorated with a replica of the KDKA transmitter and tower. Grouped around the cakemaker's dream here are (1 to r) Walter Horn, KDKA sales manager; Maurice Berardino; Mr. Berardino; Mr. Gregory; Ferris Feland, producer, and Harry Veitch, BBD0 account executive.**

**Summoned**

**ABSORBED in editing tele-type releases in the news room of WNAK, Yankeetown, S. D., News Editor Ray Clark was electrified as an announcement came over the studio loudspeaker, "And now over to you turn to Ray Clark, who is conducting an inquiring mike in the studio auditorium." Bewildered at his apparent lapse of memory, he rushed to the auditorium only to learn the announcement was part of an already transcribed program in which his inquiring mike interview had been featured.**

**BARD OF BOSTON Promotion Drive Moves Agency—Official to Poetry**

AS A RESULT of the latest promotion campaign of WRZ-WBRZ, Boston-Springfield, G. A. Holcomb, of Alley & Richards Co., Boston, was moved to poetry. For weeks Sales Manager Frank Bowes had regaled Holcomb and other time buyers with samples of music put on the station. The poetry:

I'm gassed and I'm candied, 
Carnationed and crowned, 
With a wish for a GLAD HAND, every day. Each day I am showered. 
I'm fattered and favored 
Like Count de Ciano* 
But please Mr. Bowes, Don't send a piano. 

* If you know a better rhyme with piano—go to it.

**Canada Political Time**

PRELIMINARY figures show that Canadian broadcasters, with the exception of those in Quebec province, are reporting a total of 623½ hours of time during the six-week general election campaign held March 26. Figures for Quebec province were not available. The record manufacturers have held that radio performances hurt record sales, the Decca artists contended that non-performance on the air results to loss in income and repudiate the testimony.

**The Chosen One**

When choosing a station on Canada's West Coast, remember, CJOR is chosen by MORE National advertisers, because CJOR gives MORE service...coverage...results!

CJOR
Vancouver, B. C.
National Representatives:
Joseph Hershay McGilvra

Bucks for Hams

CONTEST for children only is sponsored by the St. Louis Independent Packing Co. (Maryrose Hams) and heard over KWK, St. Louis, and KWOS, Jefferson City, Mo. Contestants obtain entry blanks from dealers and get signatures of five houseswife pledges to buy Maryrose Hams for Easter. Each entrant receives a pocket knife free, a dollar bill is given to the one submitting the largest list the previous day. The wholesaler then is able to sell the hams over the air for the strength of the number of pledges in that neighborhood.

**Foreign Copyright S Seek to Recover Fu**

SUITES against the Staatslich nehmte Gesellschaft der Aut Komponisten, Verfasser und Musikverleger (AKM) and the Staatslich G miigte Gesellschaft zu Ver kehrung Musikalischer Urheber (STAGMA), Austrian and man organizations similar to ASCAP in the United States, been filed in the New York Supreme Court by six members AKM who have received no payment STAGMA since the anchluss in 1938, when AKM taken over by STAGMA. It appears the plaintiffs, A. Walker Soc.

**New Lorillard Serie**

P. LORILLARD Co., New York April 16 will start the R Monday, a ten-minute time weekly program on WWL, New orleans, in the interests of R Roll-your-own cigarette tobac.

**More National Advertisers u**

CHS last year than ever before, time to make sure summer bookings.

CHS
HALIFAX, N. S.
THE KEY STATION OF THE MARITIMES

Additional coverage provided at additional cost by our shortwave station CHXN.
New Business

TTE SAFETY RAZOR CO., on May 4 only sponsors the derby by Derby at 65 CBS stations, 6 a.m. (DST). Agency: Max. N. Y.

CO Co., New York (gasoline), rel 25 started new programs Texas State Network stations, hru Sun. 7:30-7:45 p.m. and Sun. 7:30-7:45 p.m. Agency: A. Gruenachan & Co., N. Y.

-COLA Co., Long Island City (ink), on Ap 30 starts new series 1 on 112 CBS stations, Tues., Sat., 6-6:30 p.m. (repeat, 1 and 11-11:30 a.m.). Agency: Newell-Emmett Y.

RE PUBLISHING-Dutch, on May 23 starts Children in Chicago, and Don Lee Net- work, thru Fri., 1-2 a.m. (PST). Agency: Williams & Cunningham, Chi.

ER & GAMELCO Co., Cincin- nati, on Apr 25, rel 30 starts new programs in NBC-Blue stations, Mon thru Fri., 5-6 a.m. and NBC-Red 2 a.m. Agency: Compton Adv., N. Y.

SR & GAMELCO Co., Cincin- nati, on Apr 25, rel 30 starts new programs in NBC-Blue stations, Mon thru Fri., 5-6 a.m. and NBC-Red 2 a.m. Agency: Compton Adv., N. Y.

E JELATINE Co., Johnstown, on Apr 30, rel 30 starts Bob Barnett 7 for 52 weeks on 6 CBS stations, Mon, Wed., Fri. & Sat. m. Agency: Kenyon & N. Y.

IS ECONOMY BLOC of RNIA, San Francisco, (po- ke), on Apr 14 started for Legislature on an NM-Blue stations, Mon. thru Wed., Thurs. & Fri. 10-11 p.m. Agency: Campaign Francisco.

A Renewal Accounts

E-PALMOLIVE-PEFT Co., Super Bude (Super Bude), on March 21, rel 30 shifts 26 weeks in NBC-Red 2 a.m. stations, Mon. thru Thu., 9-10 a.m. Agency: Bowles.

A. HORNER & Co., Aus- tralia (Spam), on Apr 29, shifts 52 weeks It Happened in 58 CBS stations, Mon. thru Thurs., 5-6:30 a.m. (EST). BDO, Minneapolis.

LI PLUG CO., Camden, on April 1, rel 25 weeks It Happened in 58 CBS stations, Mon. thru Thu., 9-10 a.m. Agency: Ward Wheelock Tollipin.

IDS Inc, Jersey City on March 9, rel 30 weeks for Service News series on 31 network stations, Mon., Wed., Fri. & Sun. 8-8:30 p.m. (PST). Agency: Auster Co., N. Y.

MILLS Inc., Minneapolis on March 8, rel 26 weeks for the Band on NBC-Red 7 p.m. Agency: Hackett- smert, Chicago.

- show Show of the March 31 was renewed for 14 MBS stations, Sun.,

AMERICAN TOBACCO Co., New York (Lucky Strikes), on May 4, rel 25 weeks for a parade on 142 CBS stations, Sat., 9-9:45 p.m. Agency: Lord & Thomas, N. Y.

GENERAL FOODS Corp., New York (Spam), on April 29, rel 26 weeks for a parade on 142 CBS stations, Sat., 6:05-6:55 p.m. (repeat, 11-11:30 a.m.). Agency: Newell-Emmett Y.

CITIES SERVICE Co., New York, on April 3, rel 25 weeks for a parade on 112 CBS stations, Fri., 8-8:55 p.m. Agency: Lord & Thomas, N. Y.

GEO. A. HORNER & Co., Minneapolis, on Apr 30, rel 25 weeks for a parade on 142 CBS stations, Mon., Sun. 7-7:30 p.m. (DST). Agency: A. Gruenachan & Co., N. Y.

-LORILLARD Co., New York (Old Gold cigarettes), on May 1, rel 26 weeks for a parade on 142 CBS stations, Tues., Sat., 7-7:30, 9-9:45 p.m. (DST). Agency: Lord & Thomas, N. Y.

MENNEN Co., Newark (shaving cream), after the broadcast on April 20 will continue for the summer the Quizzedoodle program, starring Colonel Smopingle, currently on 6 MBS stations, Tues., 8-8:30 p.m. Agency: H. K. Mieskeller Adv., Adv. N. Y.

CUMMER PRODUCTS Co., Bedford, on April 26, rel 30 shifts What Would You Have Done on 5 NBC-Blue stations, from Fri., 9-9:30 p.m. Agency: Stack-Goble Adv., Chicago.

STERLING PRODUCTS Co., New York (Izod-Yeast), on April 26, rel 30 shifts Happy New Year from 64 MBS stations, Sun., 10-11 p.m. to 50 NBC-Blue stations, Sun., 10-11 p.m. Agency: Ruthrauff & Ryan, N. Y.

BRISTOL-MYERS Co., New York (Vitalia), on April 11, rel 25 weeks for a parade on 142 CBS stations, Thurs., 8-8:30 p.m. Agency: Pedlar & Ryan, N. Y.

AMERICAN TOBACCO Co., New York, on April 11, rel 25 weeks for a parade on 142 CBS stations, Sat., 5-5:30 a.m. to 6 a.m. (DST). Agency: Young & Rubicam, N. Y.

CAMPBELL SOUP Co., Camden, N. J. (Frisco-American spaghetti), on April 1 moves Lawry Ross from 45 CBS stations, Mon. thru Fri., 2-2:15 p.m. to 50 CBS stations, Mon. thru Thu., 7-7:15 p.m. Agency: Ruthrauff & Ryan, N. Y.

WETTINGHOUSE ELECTRIC Co., New York, on March 21, rel 26 weeks for a parade on 64 MBS stations, Thurs., 8-8:30 p.m. Agency: Fuller & Smith & Ross, N. Y.

AIR CONDITIONING TRAINING Co., Cincinnati, Ohio, on March 21, rel 26 weeks for a parade on 64 MBS stations, Thurs., 8-8:30 p.m. Agency: National Classified Adv., Youngstown.

BROWN & WILLIAMSON TOBAC- CO Corp., Louisville, effective May 7, will sponsor Duca Walter’s Doughboys (Sir Walter Raleigh tobacco) on Tuesdays at 9:30 CST on NBC-Red. Pla- nation Party, which replaces Nation Time (Bugler tobacco), will be heard Wednesdays at 7:30 p.m. CST on NBC-Red, with a re-broadcast at 10 p.m. Home Town (Ralph cigarettes) will be aired on Fridays at 8 p.m. on NBC-Red, with a re-broadcast at 10 p.m. on NBC-Red. Agency: Rags Co., Chicago, handles the account.

Thrown by Kite

A CURE for kites will be welcomed by KLZ, Denver, where “winds of change” have attracted young followers of Ben Franklin. Two adolescent boys toyed with some high tension wires pulled wires and all down, blacking out the North En- glish section as well as KLZ.

Special Station Planned by Store

AN INNOVATION in broad- casting, under which a department store would provide service to its charge-account customers and ab- stain from all commercials, is being con- tested by May Department Stores Co. of Los Angeles, an applicant for both a frequency-modulation broad- cast station and a television transmitter, according to Gerald Fitzgerald, executive of the firm.

In Washington for the FM hear- ings as an observer, Mr. Fitzgerald said his plan was to provide service for a nominal charge, perhaps $5 a year. Pointing out that many de- partment stores, such as Gimbel’s, Bangemers and the Shepard Stores in Boston, had pioneered early radio, he said the May Company, as the first department store applicant for a FM and television station, hoped to lead in California.

Program Problems

“The licensee buying its equip- ment from the first line companies has little if any mechanical prob- lem,” Mr. Fitzgerald declared. “Its greatest task is right pro- gramming. With the help of hundreds of thousands of charge account customers available to a department store, I should like to try first to determine the ideal program whereby they could elect a program board to give supervi- sion to programs of their choosing; these programs to be completely varied in every way so that a full fare to suit all tastes would be included in the daily radio menu.

“There would be no commercials of any kind, probably not even the name of the store. A charge of $3 or $4 a year or some such charge would be made to subscribers and they would be assured perfect programs. In the case of nationally important speeches and other programs, an arrangement could be made with the commercial station whereby in consideration of the huge extra list- ening audience furnished, the program could be relayed. It would be also possible to include, for a small extra charge, some kind of station service, perhaps pickup of any chance in the present radio program by the listener; this, of course, would be de- pendent on the quality of receiver owned. There would be many ‘chiselers’ to tune in on the station without subscription, but in the main, most people would want to pay their share.”

CASTING: Broadcast Advertising
Main orators at a recent Nutrena Mills regional meeting in Tulsa were John D. Sargent, chairman of the board, and T. F. Deitz, president of the company. They discussed the company's plans for expansion and observed the patriotic emblem. Talent for the meeting was supplied by KTUL. Nutrena broadcasts a daily morning news program on KTUL.

LaGuardia Urges WNYC Fulltime

A NON-PROFIT, non-commercial broadcasting station, operated by a Government or subdivision of a city, should have priority for wavelengths and time over any private commercial station, Mayor LaGuardia said. The Mayor, speaking before the FCC March 29 in support of the application of WNYC, municipal station, for extension of its limited time to 11 p.m. If the law does not now provide this priority, he advocated that Congress clarify it.

In a hearing before FCC Counsel Edward F. Hyland, the Mayor contended that Congress in enacting the Radio Act took every precaution to prevent monopoly on the air and laid down the policy of revocable licenses to prevent it. Mayor LaGuardia was critical of the networks, especially the DuMont and Columbia, in that they laid claim to the New York City station and municipal station, which operates daytime on 810, otherwise the only channel available to CBS-owned, 50,000-watt WCCO, Minneapolis.

He stated that “when a city of 7,000,000 people comes before the FCC on application for fulltime, there is a presumption of necessity, and no private station agrees to claim a right to prevent unlimited time by such a Governmental facility operated on a basis the proposed expansion of WNYC's time would break down the WCCO clear channel and curtail its rural service.

Mayor LaGuardia added that he appreciated the wavelengths were limited in number, but “they were also operated by too few people.” He agreed the FCC's power to revoke licenses tended to place investment of private broadcasters at the agency's mercy.

Mayor LaGuardia told the counsel for CBS, cross-examined Mayor LaGuardia on his views about the priority of publicly-owned stations over existing private stations. This Mr. Patrick said, would be contrary to the Communications Act and the former Radio Act which was passed during the Mayor's service in Congress.
LATE PERSONAL NOTES

AMID the exhibits at the recent WCKY-Junior Chamber of Commerce Hobby Lobby show were ventriloquist E. B. Wilson, president and general manager of WCKY, Cincinnati, with this puppet monkey on his knee. During the event five local hobbyists were chosen from a field of 265 for a special broadcast. A transcription was sent to Dave Elman of CBS' Hobby Lobby, and Elman chose one of the five to appear on his coast-to-coast WSPA broadcast. Mayor Stewart proclaimed a "Hobby Lobby Week", 500 street cars carried posters plunging the event, 400 window cards were placed throughout the city, along with 400 displays of the sponsor's product in local grocery stores. An estimated 4,000 persons viewed the Hobby Lobby display.

Old Timer's Return
ROYAL EASTERN Electric Supply Co., New York, one of radio's first sponsors, returns to the air April 1 on WMCA, New York, broadcasting "Smiling Lingo's" Jerry Baker and his Orchestra at 11 to 1:15 a.m., Monday, Wednesday and Friday. According to Stanford J. Goodman, sales manager of the company, Royal Eastern Electric had its first program on WRAF in 1926, presenting a musical trio, the Eagle Neutrodyne Trio, to advertise one of the first tube radio receivers. The new series, placed direct, will advertise Stewart-Warner radios and refrigerators, for which Royal Eastern is the distributor.

LAWRENCE FERRIG, formerly of LAWRENCE FERRIG, formerly of WEAF, New York, has been named sales promotion manager of the National Advertising Sales Assn., replacing Alan Wills, who has resigned to take over advertising and sales promotion for the Kaufman Stores in Pittsburgh.

LEWIS ALLEN WEISS, vice-president and general manager of WART Manufacturing System, Los Angeles; Russ Johnston, CBS Pacific Coast program director, and Marvin Young, NBC night manager, both of Hollywood, have been named honorary members of the University of Southern California Chapter, Delta Alpha of Gamma Mu, the national radio fraternity, on March 26. The honor was conferred in recognition of their contributions to the radio industry. Alec Templeton, blind pianist, sponsored on his Primary Laboratory for Alter-Self, was also so honored.

SIDNEY L. DEAN and Philip A. Richardson, account executives of J. Walter Thompson Co., New York, and Chester A. Foust of the agency's Chicago office, have been named vice-presidents.

GEORGE FAULKNER, formerly of WAP, Chattanooga, has joined WSGA, Atlanta, as director of sales of WSGA, and to the announcing staff of WSGA.

WALTER KLEIN, formerly with KRBC, Abilene, Tex., and Albert Parkinson, who has added the sales of WING, Dayton, Ohio, to his territory, has been named chief engineer of Lord Raleigh & Co., Cleveland.

BERNHARD HERRMANN, Hollywood musical director of the concluding CBS Campbell Playhouse, sponsored by Campbell Soup Co., has resigned. He will engage in CBS musical work in New York, and return to Hollywood in fall.

DAVE CASEY, formerly of WOR, Newark, and veteran press agent, has joined WOR, New York, as publicity and sales events director.

ANN CORNISH, formerly in the research department of Brodsky, Bowers, New York, and CBS, has been placed in charge of the research department of WOXY, New York.

BRYAN HUNTWAY, manager of the San Francisco office of Young & Rubicam, has returned from an extended vacation in Hollywood and a business trip to New York.

OLGA RITZ, formerly traffic manager of the old KEKE, Los Angeles, has been appointed office manager of Glasser Agency, that city.

DOUGLAS EVANS, KFI-KELA, Los Angeles announcer, has been promoted to producer.

AL CHISMARK, former control operator of WSYR, Syracuse, has been named chief engineer of WTRY, New York, to manage the account. Recent additions to the staff of the Durstine agency include George Cooke, formerly of the Stromberg Time Corp.; Walter J. Daily, daily in charge of advertising and sales promotion for General Electric Co., Cleveland, and Matthew Hufnagel, formerly of BBDO, New York.

Bob Proven, recently elected a city alderman, on April 1 celebrates his 60th anniversary as an announcer of WHRC, Hartford.
Commission Said to Have Gone Too Far, Stifling New Industry; Called 'Usurpation of Power'

A BARRAGE of editorial criticism against the FCC developed in the daily press following the March 23 television citation (see pages 29 and 50-51), ordering RCA to explain at a hearing April 8 its merchandising campaign to promote receiver sales.

Branding the action as "bureaucracy at its worst" and as "usurpation of power" several newspaper editorial writers and columnists saw in it dire forebodings for radio generally. These commentators held the view that the FCC had overstepped its authority. 

Aside from the very brief statement March 23 by David Sarnoff, RCA president, expressing "agreement" over the Commission's action, no further official word was forthcoming from RCA regarding the citation. However, Alfred H. Morton, NBC vice-president in charge of television, without directly commenting on the order, on March 26 called to 100 New York agency, advertising and station executives attending the weekly "broadcasters bull session" luncheon in New York that although there are today certain attempts to block television progress, reminiscent of those of "King Cnut and his tide", there is no doubt as to the eventual outcome.

Called Unwarranted

Industry observers generally regarded the FCC action as unwarranted. Observers were of the opinion that the industry erred when it capitulated to "limited commercial" status for television. They pointed out that after the television hearings the FCC promptly set up forms to glean from television licensees all factual data. In this connection, they pointed to the recent Supreme Court decision in the Sanders case, which holds that Congress did not give the FCC authority to regulate program and business phases of broadcasting.

David Lawrence, noted Washington columnist, commenting upon the FCC action as an instant case of other Governmental Commission joining "the wave of arbitrariness and lawlessness that swept Washington lately." He held that "a big industry has been struck down with the inevitable result that more unemployment will follow."

Asserting that the FCC was empowered by Congress to allocate wavelengths but was never given any power or control over the sale or merchandising of receiving sets, Mr. Lawrence declared that "it now seeks to grab control". If the present order is not upset by the courts, he stated, "the FCC will exercise its power over every aspect of what the owners of radio sets may or may not do."

Should Be Rescinded

"There is as much legal justification for what the FCC has just done to kill off or restrict a television—an industry in which millions have been spent in research—as there is for telling people what programs they may listen to with their receiving sets," Mr. Lawrence's syndicated article said.

Mr. Lawrence called for a "Congressional investigation of the FCC in its entirety to determine the extent to which the present law is being distorted." Pointing to other instances of parquets excesses by the FCC, Mr. Lawrence declared that in the case of television the FCC has "gone further than ever before".

He said that if there is anything wrong in RCA merchandising, the Federal Commerce Commission would have to make a finding and not the FCC.

Mr. Lawrence followed up his March 25 column with another March 26 editorial offering Supreme Court decision in the Sanders case as one which negatived the FCC television citation. He said it cannot be doubted, in the light of the Supreme Court opinion, "that the FCC now will rescind its order and let the American people have television."

"The Washington Post labeled the FCC's action as "utterly unsound" but without the "virtue of consistency." Referring to the FCC hearings looking toward introduction of another new "radio" device, he said that it if the Commission considers it its duty to protect the hand of the FCC's two-to-do consumer, potentially affected by RCA's television selling campaign "then it is infinitely more important that it halt at once. The idea of setting W2XBS, as the FCC has done, shall be established commercially."

It added it is an open secret that this advance in radio transmission will "will make possible 2,500 but 45,000,000 radios become old-fashioned overnight."

The Washington Post labeled the FCC's action as "utterly unwarranted", and said that the order "in which privately-owned industries can attract capital with which to perfect the products of invention is to ask the public to share the developmental costs by buying their goods or services."

"The FCC's reluctance to permit legitimate competition of television programs suggests an excess of caution," said the Washington Post. "To be sure television is an infant industry. But unless more encouragement is given to stimulate public interest in the initial stages of its development, it will be powerless to earn just what the advocates of television's wonders can be most usefully employed."

Cartoon and Comment

In its issue of March 27, the New York Herald-Tribune published a two-column cartoon, signed especially by Mr. Lubcke, Don Lee's syndicated Avenue March 28 which bore the caption "Our Haymaker" and the initials "H.H." at center, described as "That Long Nose of Government, Again". There was depicted the public in front of a television receiver with the slogan "Television Business."

The television reception, however, was blocked by the program of a group labelled "FCC". The public was represented as observing: "Say! I'm willing to pay for this!"

The Philadelphia Inquirer commented March 28 in an editorial titled "Bureaucracy's Blackout of Television" that there probably was an "arrangement" for a radio industry if similar Federal paternalism had marked their early days.

Government regulatory bodies are necessary, the Inquirer wrote, "but they can be interfering nuisances that hamper industrial advancement, shackles business and stifles research." The FCC was set up when railroad conditions made Federal regulation essential. But the "situation has changed and it is now the duty of Government to regulate the railroads to death."

"There is a legitimate place for the FCC. But it oughtn't to be allowed to stand progress by keeping a bureaucratic blackout on television."

An Effective Medium

Mr. Morton, in his March 26 address in support of NBC's experience with regular television broadcasting during the last year. Asserting that NBC currently is presenting 11 and 14 hours of video programs a week to televisioners in the New York area, he estimated there were about 2,500 "in the home" within the range of NBC's television transmitter, of which about 70% are tuned to evening telecasts and 60% to afternoon programs.

"Television will stand or fall on what passes across the screen in the living room of set owners," he declared. He added that television versions of stage dramas have been the most popular presentations. As an example, he said that a "live" television combines the three essential elements of salesmanship—sight, sound and motion—and adds a new element.

Mr. Morton said authorities in advertising have estimated television will "pack a punch" from four to ten times as powerful as that of any existing medium.

Regarding networking of television, he said NBC hopes to inaugurate television tie-ins with New York with Philadelphia and then with Baltimore and Washington. All we will do to go ahead with adequate encouragement and a moderate freedom of action," he declared.
The RCA 311-A is an entirely new instrument of unusual accuracy and reliability for measuring and checking carrier frequencies of broadcast transmitters. Employing advanced methods of precision frequency measurement, the 311-A makes it easy for the operator to know accurately his carrier frequency at all times and to maintain its value well within the 20 cycle deviation limits the FCC will require.

Designed for maximum stability and freedom from drift, the 311-A enables stations to avoid the expense of too frequent check measurements. An extra large Deviation Meter permits the operator to check deviation easily from across the average room. A unique audio discriminator circuit provides reactance balance rather than resonance equalization.

The oscillator employs a "V" cut low temperature coefficient crystal mounted in a holder especially designed to eliminate frequency changes caused by sudden shock or vibration. The holder is contained in a heat chamber whose temperature is controlled to .05°C. The oscillator circuits are located in an outer temperature-regulated chamber. Both thermostats are factory adjusted. Additional "watchman" thermostats furnish safety protection against accidental overheating.

A careful analysis of this instrument will reveal that the customary high standards of RCA Engineering have again created an instrument of real value to broadcasters.

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>POWER SUPPLY:</th>
<th>105-125 volts; 50-60 cycles; 165 watts total.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. F. INPUT:</td>
<td>Less than one volt required.</td>
</tr>
<tr>
<td>FREQUENCY RANGE:</td>
<td>540 to 2000 KC by means of individual crystal.</td>
</tr>
<tr>
<td>ACCURACY:</td>
<td>Crystal oscillator stability, 2 parts per million. Effect of 25°C temp. change, less than .6 cycle.</td>
</tr>
<tr>
<td>SIZE:</td>
<td>Rack mounting panel—width 19&quot;, height 15-3/4&quot;.</td>
</tr>
<tr>
<td>WEIGHT:</td>
<td>96 pounds. (unpacked).</td>
</tr>
</tbody>
</table>
THE Nation's Station has always been among the first to adopt proven new methods of broadcasting. Not only is WLW's technical equipment as modern as can be created, but a continuous program of research keeps it abreast of the newest developments. Its research laboratory has developed numerous new ideas which have been accepted by manufacturers and broadcasters alike.

Equipment is not installed and then used until completely antiquated or until the full limit of depreciation has been written off. Instead, it is constantly improved and kept up-to-date through research and experimentation.

Justifiably proud of its engineering achievements, the Nation's Station suggests that advertisers consider these things, too, when planning to sell the vast mid-west market.