



# The Pittsburgh Oscillator

Newsletter of the Pittsburgh Antique Radio Society

Volume 5 Number 1

Whole Number 17

March 1990

## DR. RAY FITTERER TALK ON FESSENDEN, NOVELTY RADIO CONTEST HIGHLIGHT MARCH 17 MEETING AT WESTINGHOUSE LODGE

In a book produced by the U.S. Navy he is described as "the hot-tempered, stubborn, self-opinionated, and intolerant scientific director of the National Electric Signaling Co.)\* In 1903 the U.S. Secretary of Agriculture described him as "intractable and insubordinate as an employee, unreliable in his statements and extravagant in his claims as to the performance and possibilities of his inventions."\* Reginald A. Fessenden was also the holder of hundreds of patents in the U.S., England, and Germany for inventions as diverse as car-parking machines, the fathometer, and "book(s) reproducible by radiant energy." Along the way he also got dozens of patents for radio transmitters and receivers. And from 1893 to 1900 he was the first Chairman of the Department of Electrical Engineering at the University of Pittsburgh. >

Dr. G. Ray Fitterer, our speaker at the March 17 meet, is going to tell us much more about the life of Reginald Fessenden. Dr. Fitterer, himself the retired Chair of Pitt's Department of Metallurgical Engineering and Dean of All Engineering from 1951 to 1965, has had a long-standing interest in Fessenden. His paper on Fessenden is presently under consideration for publication by *I.E.E.E. Spectrum*.

PARS members should enjoy this look at another side of radio history. The program starts at 1 p.m. A map to the Westinghouse Lodge is on page 12.

Continued on next page >

### IN THIS ISSUE

New Honorary Member . . . Page 3  
Radio Magazines . . . Page 5  
Dear KDKA . . . Page 7  
Dear PARS . . . Page 10

\*See Linwood S. Howeth's *History of Communications-Electronics in the U.S. Navy*. U.S. GPO, 1963, pp. 58, 137.

< Continued from previous page

PARS first novelty radio contest will be another attraction at the meet. We had some trouble at the last Board meeting defining what a novelty radio is, but generally we think it's any radio that doesn't look like one.

Do you have a radio built into a watch or a watch built into a radio? Does your radio also serve as a flashlight or other household appliance? Did you build a radio that turned out to look like a book? Do you have a radio in the shape of a dog? Does your dog have a radio in him? All of these items, whether home brew or commercial, may be classified as novelty radios.

### You be the judge

To sweeten the pot there is a prize involved. The second annual John W. Haught Award will go to the novelty radio voted Best of Show. The judging this time isn't going to be done by a small select group. The prize winner will be determined by the popular vote of all those PARS members in attendance.

Our educational category will be available for those who do not wish to compete in the contest. Any radio may be displayed in this category.

Also scheduled for the meet is a flea market, beginning at 10 a.m. In case of clement weather, tables are available at the entrance to the Lodge. Otherwise, limited space is available in the main meeting room inside.

Come hear about Reginald Fessenden, buy or sell in the flea market, and see what novelty radios have been harbored over the years in our collections. <>

## THE PITTSBURGH OSCILLATOR



David Kraeuter, Editor

THE PITTSBURGH OSCILLATOR is the official publication of the Pittsburgh Antique Radio Society, Incorporated (PARS). Published quarterly. Editorial offices at 506 East Wheeling Street, Washington, PA 15301. Subscription is free to members of the Society. The annual dues are \$10, payable to the Pittsburgh Antique Radio Society. A date after your name on the mailing label means that your dues have been paid for that year. Entire contents of THE PITTSBURGH OSCILLATOR is copyright 1986 by PARS and may not be reproduced in any form without permission of the Society.

The Society is incorporated as a non-profit corporation. The Society is dedicated to the preservation and exhibition of historic communications equipment and early electronic entertainment media, with an emphasis on the Pittsburgh area and related material. Members are encouraged to acquire, restore, or replicate historic items and collect publications, recordings, and other materials related to the history of communications and broadcasting.

--Article II  
PARS Constitution

Honorary Member	Raymond M. Bell
President	Richard Brewster
Vice President	John Haught
Secretary	David Kraeuter
Treasurer	Bill Dawson
Board of Directors	Tom Dixon, Sev Dvorsky, Laten Fetters, Rick Harris, and Ray Hill

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Library of Congress Card Order Number: sn88-1011

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## G. RAY FITTERER ELECTED PARS HONORARY MEMBER

During its October 23, 1989 meeting, the PARS Board unanimously voted an honorary membership to G. Ray Fitterer, our guest speaker in March and a former Dean of Engineering and Chairman of the Department of Metallurgical Engineering at the University of Pittsburgh. Dr. Fitterer was elected an honorary member "due to his research and interest in the life and times of Reginald Fessenden."

Dr. Fitterer's long career has been too varied and productive even to be summarized here. It includes inventions and patents, supervision of research at the U.S. Department of Defense, various board chairmanships, fund raising activities for the University of Pittsburgh, and international work in engineering education.

There is also an extensive list of professional honors from the American Society for Metals, the U.S. Office of Scientific Research and Development, the American Institute of Metallurgical Engineers, the American Institute of Chemists, the Universidad Tecnica Federico Santa Maria in Chile, and the Catolica Universidad de Cordoba in Argentina.

Add to these professional activities Dr. Fitterer's career as a part-time musician and his very careful work in a DuPont explosives plant during World War I, when he was too young to qualify for military service.

PARS members may look forward to seeing how this wide experience and varied career will influence Dr. Fitterer's talk and writing about the work of another widely-experienced scientist, Reginald A. Fessenden. >



Dr. G. Ray Fitterer holding the Boston newspaper which revealed the results of Fessenden's law suit against RCA. (Photo courtesy of Dr. Fitterer.)

## DECEMBER PRIZES AND A PLAQUE

Tom Dixon won first prize in December's regenerative receiver contest. The prize was awarded for Tom's operating Crosley 52 receiver. Ray Hill took second prize in the same category for his Penn C radio. Howard Tobias won first and second prizes in the crystal set category.

David Kraeuter was awarded a plaque "for outstanding service as editor of the *Oscillator*." <>

Where Crystal Meets Chip**PARS NEWSLETTER GOES ONLINE**

*Antique Radio Classified* may be planning to go online in 1990, but the *Pittsburgh Oscillator* has been online since late in 1989. On November 29, 1989, the December issue of the *Oscillator* became available on CompuServe Information Service. The March issue of the newsletter was added to the database in late February of 1990.

For those of us who have not yet straddled the gap between the high-tech world of telecommunications and the less than high-tech world of antique radio, the above paragraph means that the March and December newsletters are now available to be read in electronic form on your personal computer by hooking it up to CompuServe through your telephone line. [See *Oscillator* 16, page 6].

The two issues of the Society's newsletter have been put on CompuServe experimentally to determine if there is enough interest to form a permanent database or forum on CompuServe for the use of antique radio enthusiasts. If there is enough interest shown, other information of use to radio hobbyists (wanted/for sale ads, auction reports, etc.) can be included as a permanent feature.

Once logged on to CompuServe, readers may gain access to the newsletter by visiting Section 7 (Other Collectibles) on the Collectibles Forum [type GO STAMPS].

For more information on the newsletter in electronic form, contact Editor Kraeuter or call CompuServe's Customer Service at (800) 848-8990. <>

**WE WELCOME THESE NEW MEMBERS**

**Duane E. Kasprzyk**  
905 Coulter Road  
White Oak, PA 15131  
751-1486

**Brian Roberts**  
3068 N. Evergreen Road  
Pittsburgh, PA 15237  
931-4646

**John M. Wiater**  
102 Thomas Drive  
White Oak, PA 15131  
751-0932



"HERE IS THE SUGAR WE OWE YOU, AND MA SAYS CAN SHE BORROW YOUR HEAD PHONES AND B BATTERY. WE'RE GONA HAVE COMP'NY TONIGHT"

(Cartoon suggested by Tad Drogoski. Source unknown.)

### EARLY RADIO PERIODICALS By Raymond M. Bell, ex-W3FUU

It was December 1-1920 that KDKA began regular programming. The idea of picking up music and voice "from the air" spread rapidly, but mostly by word of mouth. You could build your own set or buy a Westinghouse Aeriola Sr (1 tube with batteries) for \$60 or a Westinghouse Aeriola Jr (crystal) for \$25. In those days not much attention was paid to what was being broadcast. Just to hear anything was an achievement.

It was not until September 10-1921 that the *Pittsburgh Post* listed a "wireless program" for the Westinghouse station (no call letters mentioned). Baseball scores were announced at intervals from 5:25 to 9:00 p.m. with a time signal at 7:00 p.m. "Music" was listed from 9:05 to 10:00.

On January 1-1922 Westinghouse began to publish *Radio Broadcasting News* in which the KDKA programs were listed for the week. Sunday, January 1 there were three church services. Monday, January 2, the Rose Bowl football game, Babson's business letter, music at 8:30. The weekly program listed music at 10:00, 12:30, 2:00, 4:00, 8:30; a bedtime story at 7:30, news at 7:45 and 9:00. Apparently the distribution of the program was free. Programs were also given for the other Westinghouse stations: KYW Chicago, WJZ Newark, and WBZ Springfield. The writer heard KDKA for the first May 18-1922.

By 1923 *Radio Broadcasting News* cost five cents and also carried programs for KQV Pittsburgh, WGY Schenectady and WLW Cincinnati. It soon became the >

radio edition of the *Pittsburgh Post*, published each Wednesday. In addition to programs, there was news and technical information.

An old standby was the weekly *Radio Digest* (ten cents) which began about 1922. Here were all kinds of useful information, especially a list of stations on the air. This list grew larger each week. In those days frequencies were unknown. All stations were listed by wavelength.

The July 26-1924 *Digest* listed times for 80 stations. Most listening was done after dark. Not all stations were on the air every day. KQV was on Monday, Wednesday, Friday. Chicago stations were silent Monday evening, so out-of-town stations could be logged. WGY was silent Wednesday evenings, WLW Friday, Saturday. Sunday broadcasts were limited. Nothing was on after midnight, except stations to the west.

Later monthly magazines such as *Radio Broadcast* and *Radio News* became important for both listeners and experimenters. The best-known publisher then was Hugo Gernsback. Listeners wanted programs, news of radio personalities and most of all technical data - how to build a radio, how to tune it, what kind of antenna to use.

Some idea of the growth of radio can be gained by checking the *New York Times*. On March 30-1922 programs were listed for five stations, by July 1-1923 there were 36. Times have changed. Daily programs for KDKA radio are no longer published. *Radio Broadcasting News* has been replaced by *TV Guide*. <>

Past and future

**BOARD AND OFFICER ELECTIONS**

At PARS December 1989 general meeting Tom Dixon, Sev Dvorsky, Laten Fetters, Rick Harris, Jr., and Ray Hill were unanimously re-elected to the Board of Directors for the 1989/90 term. PARS unofficial parliamentarian Tom Dixon noted that of these Board members only Rick Harris will now be eligible for re-election to another term since this will be the second consecutive full term to be served by the other Board members.

We would like to remind PARS members again that our March meeting will see the election of four new officers. Each of the current officers must vacate his office as of March. We solicit all members' suggestions as candidates for these offices, and also remind you that any PARS member may enter his or her own name as a candidate. <>

**PARS BEGINS PUBLICATION OF A SERIES OF MONOGRAPHS**

The Society has begun publishing a series of monographs dealing with radio history.

Appropriate to the subject of our March meeting, the second publication in the series is titled *The U.S. Patents of Reginald A. Fessenden*. This 25-page document lists the titles, numbers, and dates of Fessenden's U.S. patents, and contains a title index.

The first publication in the series is the latest edition of the Frank Conrad bibliography, listing Conrad's U.S. patents and dozens of publications about him. It updates the original list which appeared in 1988. >

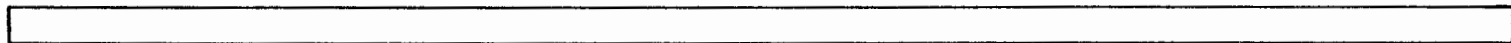
Both items will be on sale at the March meet for \$4 each. If you prefer you may order by mail by including an additional \$1 per monograph to cover handling and first class postage. Order from the PARS address shown on page two in the masthead.

Publishing expenses for the first two monographs have been provided by an anonymous donor. PARS welcomes any suggestions or contributions for future publications in this series. <>

**EARN BIG BUCKS IN NEW ENTERTAINMENT FIELD**

The following (early 1920s?) pay schedule was found among the KDKA archives in the Pennsylvania Room of the Carnegie Library of Pittsburgh:

Morning and Noon announcer,	
per week day	.75
Saturday	1.00
Dinner Concert announcer	2.00
Post Program, evening, announcer	2.50
Evening Concert, announcer	3.00
(Arlin 3.75)	
Saturday Afternoon, announcer	3.00
Sunday Afternoon, announcer	3.00
Stage director (Mr. Popcke),	
per concert	3.00
Escorts, per evening	2.50
Chief Escort (Mr. Boyd),	
per evening	3.00
Studio Butler (Jones),	
per evening	2.50
Dreamtime Lady, per month	80.00
Orchestra	
Inside men, per concert	6.00
Outside men, per concert	7.00
Band	
Inside men, per concert	6.00
Outside men, per concert	7.00



## DEAR KDKA: LISTENERS WRITE FROM AROUND THE WORLD

November 30, 1924

Dear KDKA:

We are out on the lonely Wild Bush Prairie, away among so many lions, elephants, etc., that you would think that you were near the zoo, and to pick you up amongst such surroundings seems like a wild dream, in fact my pals say that I must have had a late lobster supper. But I heard you as clearly as if you were in my camp, "Grandfather's Clock" put back my clock thirty years (30) and I thought that the, (or any) man three decades ago, that would have forecasted such a wonder, would have been put in a lunatic asylum - it was truly eerie and uncanny.

Your band selections were equally clear, especially the above, and the man singer also. Atmospherics were bad though. Can you call me up some Saturday night to prove to the natives that it was not a dream, as this would prove to them that the whites are not witches. We were only using a 10-foot Brownie wireless receiver crystal set, and the JB broadcasting station broadcasted you.

Many thanks for a pleasant concert.

Yours truly,  
(Signed) Robert Lester

P.S. - Some of the lady's notes and words made the Kaffirs think that I was entertaining a white woman, and they are still searching for her in the camp, and will not be convinced that it is wireless. Her intonation was superb indeed. Convey these words to all artists concerned. Between the growls of the lions and leopards that were fighting for the poisoned carcass, and the roar of the >

thunder and unusually bad atmospherics, it was not quite clear to catch the lady's full voice but the words in a quiet second, of "My Dear" from her, were as clear as my own voice. I should like a note from her as to the title of that item, (and also if she used those words) as it was very pleasant, and we shall use the same here with your permission and perhaps you will send me a copy and I will refund the costs. I want to satisfy some doubtful Thomases and you can help me do so through the enclosed suggestions.

It was a great performance indeed and worthy of such a great Nation's sons and daughters.

Robert Lester. M.E.  
Author and Press Correspondent  
Johannesburg, Transvaal, So Africa

December 10, 1924

KDKA --

For God's sake broadcast all over the world. "The end of the world is here." Every one fast and pray because God has sworn Eternal vengeance on his people because of my sins.

Bess Jones  
Mich. Battle Creek

Santa Ana, El Salvador. C.A.  
Sept.27.1931

Dear Sirs:

Will you be so kind to send me a list of the Foot-Ball games you will broadcast during this year's season, and the scores >

of other Foot-Ball games. Kindly give me Eastern Time. Thanking you very much and hoping to hear from you soon. I am

Yours truly  
Salvador Cielo V.

---

February 24, 1927

ALGOOD TENN 9:35 A  
RADIO STATION KDKA  
CARE PITTSBURGH POST  
PITTSBURGH PENN

WE HAVE A BABY GIRL BORN ON WASHINGTONS BIRTHDAY WE ARE DEPENDING ON YOU AND YOUR LISTENERS TO SUGGEST A NAME CAN WE DEPEND ON YOU WIRE ANSWER COLLECT

MR AND MRS WILLIAM CLAPTON.

---

Hurriedly---while the dish-water boils.

7:29 A.M.

Mt. Pleasant, Ohio.

October 26, 1926.

Dear Sir:

It's queer how things happen in this world--just happen, it seems. Last night while Mr. "Eddie" Guest was beginning his part of your program, a former neighbor came in. The last year for "the kiddies" sake the man and wife decided to live together again. I can't describe the scene in our home, that man with his bowed head, living over his young married life, his wife, his children. And, oh, how forcibly was the beauty of home spoken to him. I only regret that she did not hear it.

My husband said, "Those recitations were worth the price of the machine." >

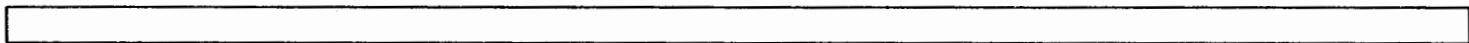
Reception last night was wonderfully good and, of course, we are able to get KDKA without much "steam" but the air was so clear that one imagined the speaker was in the room.

Like thousands of his readers we greatly admire his heart-throbs and to hear him was a pleasure indeed for when he was on at another station many months ago, we could not get his voice at all.

While I write this I hear "Spike" Shannon, making 'em sit pretty and box with a punch. I would not go without that little treat in the morning for a great deal. I sincerely hope they do not have to go off the air. I sent them a little "token of my affection" if that will help turn the trick.

Do you think you can get a special singer from McKeesport on one of your evening programs? It is a Mr. Hugh Pendelton. I believe that is the name. I haven't the least idea who he is, whether a professional singer or just a helper out; but I will say he has one of the best voices ever heard over our radio, and I am not very enthusiastic about any singers. This man's voice is the voice to save souls. I believe he mostly sings the little . . . lullabies. Good? Hear him and find out. Simply splendid. Everyone here and elsewhere has praised him, so I wrote to that station asking that they get him to sing. Nothing came from them. Don't know why. I do know I am voicing the sentiment of many admirers when I ask that he may appear in an evening's program.

My husband finishes up his office work at home to the tune of your dinner concerts. As he, too, is a musician, he thinks there is nothing like KDKA when >





it comes down to real music. Personally, I am unacquainted with the notes. I know good music when I hear it. But I am a newspaper and magazine woman so that is where Edward Guest comes in for all the admiration imaginable for sometimes it is hard to write. What comes from the heart goes to the heart and truly he writes from the heart. We thank you for your untiring effort to please us.

Thank you.

Yours cordially,  
Mr. and Mrs. Randy Turner.

180A Sutherland Rd.  
Lyll Bay.  
Wellington, New Zealand  
21st Oct 1932.

KDKA  
Pittsburge

We got great results from your station to-day we all enjoyed programme very much. Hoping to receive a photo of that very nice announcer.

Yours Sincerely  
Miss E. Quarter.

Box 203  
Union, S. C.  
Jan. 21, 1927

Station K.D.K.A.  
Pittsburg, Pa.

Dear Sirs,

In listening in on the radio I enjoy your programs more than the programs of any other station. I have a little grand-daughter two-weeks old and would appreciate a name for her from Station >

K.D.K.A. I am sending you an addressed envelope. Thanking you for the name and for your wonderful music which I enjoy most heartily, I am

Sincerely yours,  
Mrs. B. D. H. Johnston

P.S. Hope to hear from you at your earliest convenience.

\* \* \*

And KDKA replied:

March 2, 1927

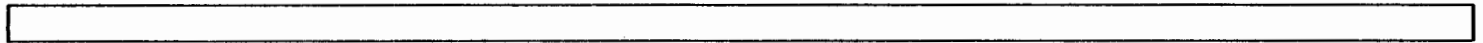
Dear Mrs. Johnston:

We appreciate the honor conferred on us in your letter of January 21st but we hesitate to assume such a responsibility. We should not wish to handicap the young lady nor subject ourselves to her displeasure should she grow up and learn that we have been responsible for her name.

We trust that in your own family connection you may be able to decide upon a suitable name for this young lady to whom we send our best wishes even though she may not be able to understand them at the present time.

Yours very truly,  
(Signed) G. Dare Fleck  
Program Director  
Station KDKA.

[Above letters were taken from the files of G. Dare Fleck, KDKA's Program Director in the 1920s and 1930s. The files are now in the KDKA archives in the Pennsylvania Room of Carnegie Library of Pittsburgh. The writers' names have been changed]. <>



DEAR PARS: READERS WRITE FROM AROUND THE COUNTRY

"[We] have enjoyed our membership for the past year. However, we joined because we thought there would be a wide range of interests in antique radios. We understand the importance of KDKA broadcasting in the history of antique radio study, but this group seems ever consumed with KDKA and not very interested in the wide range of study this field offers. We support KDKA but would like to see more."

"More guest speakers desired."

"Would like to see the *Oscillator* upgraded!"

"You've got a fine organization. Everything seems great."

"The *Oscillator* is a fine newsletter. Congratulations to the editor."

"Keep up the good work. I really enjoy the *Oscillator*."

". . . [I suggest] Frank Conrad be made an honorary member. He was a founder of the I.R.E. and an honorary member of the Engineers Society of Western Pennsylvania . . . . Keep up the good work."

ESKIMO AND HIS SQUAW LISTENING IN AT c-5AO, POND'S INLET, BAFFINLAND.

—

A Westinghouse Electric Post Card, with caption. Date unknown.



For four months every winter the sun does not shine on this lonely outpost of the Royal Canadian Mounted Police, at the northern tip of Baffinland. Within five degrees of the Arctic Circle, members of the post depend on radio for contact with the outer world, and especially on the regular and special programs of Westinghouse Station KDKA. Four special programs have been broadcast each winter from KDKA, and the other Westinghouse Stations--WBZ-WBZA, Boston, and Springfield; KYW, Chicago, and KFKX, Hastings, Neb. Messages from relatives and friends in Canada and the States to isolated residents in the Arctic regions feature the special broadcasts. Station c-5AO uses short-wave receiver and transmitter.



????????????????????

### STILL MORE QUESTIONS FOR MR. JOHNSON

1. We've heard that very early television sets had their picture tubes mounted vertically and were viewed via a mirror because the tubes gave off large amounts of radiation. Is this true? If not, why were the tubes mounted vertically? [See picture of early Zworykin set on page four of *Oscillator* 16.]
2. Why was 78 r.p.m. chosen as the speed for 1940s phonograph records? Why were 45 r.p.m. and 33 & 1/3 r.p.m. chosen? At what r.p.m. do compact discs rotate?
3. Craig Dawson wants to know why the U.S. is on 60 cycles a.c. while other countries are on 50 cycles.
4. It is said there is no such thing as a perfect vacuum. So how close do vacuum tubes get?
5. Were the beautiful honeycomb and other coils we see in 1920s radios wound by hand or by machine?
6. Should outside antennas, such as long wires, be disconnected from radios during storms? Should they be grounded during storms? If so, will they "invite" being struck by lightning?
7. If lightning bolts generate currents in the thousands of amperes, why don't down leads from lightning rods melt like fuses?
8. Are any recordings available that would give an idea of what reception from a spark-gap transmitter sounded like?
9. How do electrons get to the lighted surface of "eye" tubes (6E5, 6T5, etc.)? <>

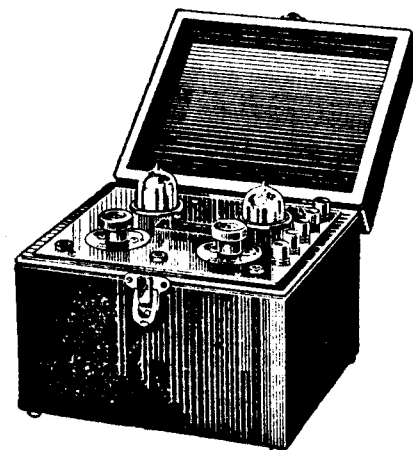
### The Radio Calendar

#### FUTURE RADIO-RELATED EVENTS

The 1990 dates for PARS meets are March 17, June 16, September 8, and December 8. Note that the September date has been changed from the one originally announced in the last newsletter to avoid conflicting with the AWA meet.

The Antique Fairs at the Meadows will be on February 25, March 25, April 29, May 27, June 24, July 29, August 26, September 30, October 28 and November 25.

Publication of the 1990 PARS roster has been postponed in order that it may contain the names of the officers that will be elected in the March meeting. The roster will be mailed with the June issue of the newsletter. Other changes will be reflected in the masthead of the June issue.



**CUT NO. 168**  
**Radiola Senior Amplifier**

From the RCA Electrottype Specimen Book  
in the collection of Howard Tobias.

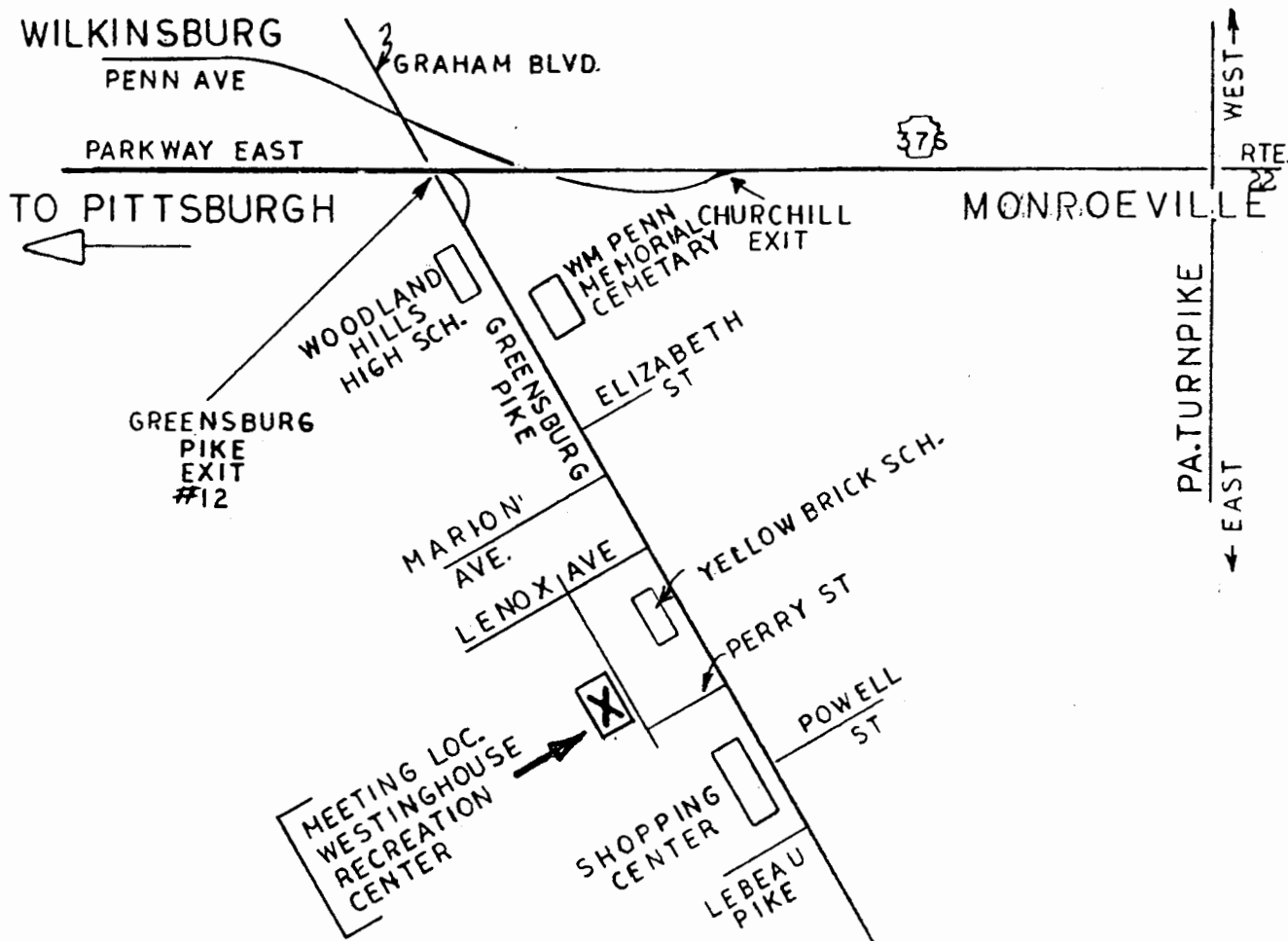
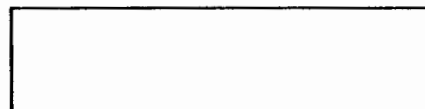
**Directions and Map to the Westinghouse Lodge (Recreation Center)**  
 (Courtesy of Richard J. Harris, Jr. and John W. Haught)

(1) From the north: Take I-79 south to Parkway West (Rt. 279). Travel east following signs marked "Rt. 376 Monroeville". Exit the Parkway at the Greensburg Pike exit. At first traffic light turn left onto Greensburg Pike. Follow Greensburg Pike about two miles. Turn right onto Perry Street after passing yellow brick school building. Turn right into the Lodge parking lot.

(2) From the east: Take the turnpike west to the Monroeville exit. Get on the Parkway East (Rt. 376) heading west towards Pittsburgh. Exit at the Churchill exit. Travel straight ahead (no turns) and at the second traffic light turn left onto Graham Blvd. Follow Graham to stop sign. Turn left onto the Greensburg Pike. Then follow the directions in (1) above.

(3) From the west: Travel the Parkway West (Rt. 279) and follow directions in (1) above.

(4) From the south: Take I-79 north to Parkway West (Rt. 279). Follow the directions in (1) above.



For more information call (412) 222-6678 or (412) 241-1085.

