



The Pittsburgh Oscillator

Newsletter of the Pittsburgh Antique Radio Society

Volume 5 Number 4

Whole Number 20

December 1990

MARKER PRESENTATION AND RESTORATION TALKS SET FOR DECEMBER 1 MEET

Our last meeting of the year returns us to the Frank Conrad garage at the Wilksburg Elks on December 1. (See maps on page 12). Note that December 1 is a revised meeting date, different than the one announced earlier.

Our new meeting date will coincide with the presentation of an historical street-side marker by the Pennsylvania Historical and Museum Commission. Mr. George R. Beyer, Associate Historian of the Commission, will present the marker commemorating the early radio work of Frank Conrad. A similar marker honoring radio station KDKA is to be presented to KDKA on the previous day.

The general meeting will start at 1 p.m.; a flea market will begin at 10 a.m. in the parking lot.

In response to requests that PARS present programs about antique radio and tv restoration, Richard Brewster and David Krauter are each going to

present some ideas about restoration projects they have recently completed.

Richard Brewster will describe restoration work he did on a 1939 RCA TRK12 television. Although the TV restoration was little more difficult than that of a radio, it had the potential of being much more hazardous.

David Krauter will reveal some of the things he learned by restoring a 1924 Radiola Super VIII with a little help from his friends. All 10 cubic feet of this radio are planning to be at the meet and operating. <>

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Pittsburgh--A Radio Broadcasting Pioneer

All the issues**A FEW SIGNALS FROM THE EDITOR**

Lots of things are happening in PARS and the world of antique radio just as we are going to press. (See pages 4, 5, and 6.) We hope to have more details on these events in a future issue or at the next PARS meeting, scheduled for December 1.

We trust this issue has enough items to keep most readers entertained for a while next to the fireplace on a cold December afternoon with the three-dialer playing softly through the table talker. And if not, you might want to use the accompanying index to the Oscillator to locate and read or re-read some of the other stuff that has appeared on these pages in the last 20 issues. We thank Nick Cavoti for sharing his computer expertise and laser printer to produce the index.

Not to be missed in this issue is Bill Johnson Jr's. article beginning on page 7 which resulted from our request for someone to tell us what it was like to live in a radio-less world. In today's parlance the piece could have been called "Un-Radio". As you will see, sometimes you can say almost as much about a thing by talking about its antecedents or its absence as you can by talking about the thing itself.

Can it really be that the next issue will be in celebration of our fifth anniversary? We're planning a sort of magnum opus for that issue, and anyone who wants to join in is urged to get their material to the editor now so that it can be included in that sure-to-be-sought-after electro-historico-biblio-literary happening. <>

**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 1990 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

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In the letter box
CALL SIGNS, FREQUENCIES, AND Q&A'S

Dear PARS:

You probably have received a couple of comments by now regarding Dr. Bell's **Milestones** in the last issue.

In the years 1941 to 1943, FM radio stations were assigned a very unique call sign. Westinghouse may have been assigned 45.7 MHz, I don't know, but if they were the call would be W57P and not W75P. Conversely the Pittsburgh call W75P would require a frequency of 47.5 MHz. Both of these were legitimate frequencies in the old FM band.

The scheme worked as follows:

1. "W" or "K" depending on the banks for the Mississippi River. ["W" for east of the river and "K" for west].

2. The two digits defining the frequency by dropping the first digit (4) then combining the second and decimal digit as a single number. 44.7 MHz = 47, 47.5 MHz = 75.

3. Finally an attempt was made to spot the city by the trailing letter or letters. Philadelphia = PH. Pittsburgh = P.

One could then have a pretty good idea that K43SF was in San Francisco on 44.3 MHz. W47NV was in Nashville on 44.7 MHz . . .

[Pittsburgh did have a W75P FM Station in 1941, but due to a transposition error its frequency was printed as 45.7 MHz in Oscillator 19. The correct >

figure is 47.5 MHz.--Editor]

The milestone of 441 line TV in 1939 bothered me because we have seen 525 line (KDKA-TV) on sets such as Dick Brewster's 1938 Andrea 5 incher. I thought it not practical that the horizontal sweeps should be able to accommodate 441 and 525. Here is where I was wrong.

The first NTSC (National Television Systems Committee) proposed the 525 line standard. This was adopted by the FCC on May 2, 1941 to be effective July 1, 1941. July 1, 1941 is a milestone because three things happened. 525 lines began. Commercial television was authorized to begin. Those experimental licenses with the "W2Xxx" calls were changed to WNBT, WCBW, and WABD in New York City.

I received a reply to my inquiry from Jack Davis, writer of the television column in the AWA magazine. He said most of the existing sets were recalled to re-align the sound IF's to allow "slope-detection" of the new FM sound. We heard this work quite well on Brewster's set. He said that the horizontal range was usually ample to allow "tweaking" up to 15,750 Hz. The old frequency of the locked horizontal oscillator would have been 13,230 Hz. Horizontal oscillator frequency is the scanning lines times the frames. (525 X 30 = 15,750), (441 X 30 = 13,230). This is the high pitched squeal that some of us young fellows can hear.

In looking up this info, I came across another discrepancy in my understanding of early TV. In addition to dropping channel one >

(44-50 MHz), I now realize that two through six were also jockeyed a bit. A detailed article written in 1944 by a ham radio operator visiting WABD gave the channel number as "four" and the frequencies as neither four nor five as we now know them. Ultimately WABD ended up on five and WNBT on four.

Bob Rockwell

[Thanks to Bob Rockwell for these insights into the intricacies of FM and TV history. Think quickly. How many homes do you know of that do not have at least one TV set? What does it mean that something as complicated as a TV set is also so commonplace?--Editor]

Dear Pittsburgh Oscillator:

. . . Thank you for the May 28th complementary proposal for my anchoring a regular question and answer article, but I am simply not sufficiently qualified. I doubt if any one member of us is. We all probably can flounder among certain particular questions on the successive frontiers of electronics.

The best solution is a forum conducted by a recognized officer of the Society who would solicit, select, assemble and organize the questions, to which there would have to be a significant response by a fair number of the members; the answers to be judged, confirmed for correctness and authenticity; arbitrations, compromises and resolutions of controversy in a pleasantly agreeable manner; and even seeking outside professional assistance when necessary on occasion. Even if I were so qualified, I am now >

seventy-five and live among incom-
pleted projects awaiting my attention on a veteran's pension in a house that eats up over 50% of an income which is under the limiting control of the Veterans Administration. I thus have to do as much of my own maintenance work as I am able.

If the nostalgic piece [See page 7] is too long, it will be all right to shorten it. Undoubtedly it would be of interest to readers only in proportion to their own personal relating to its individual details.

William J. Johnson, Jr.
KA3 LRE (ex-W8TVC, 1939)

<>

HAPPY BIRTHDAY, KDKA

KDKA turned 70 on November 2. Several PARS members were on hand at KDKA to help celebrate.

An outstanding showpiece of the celebration is the replica of KD's first broadcasting room that was recently constructed by Rick Harris, Jr. and other PARS members. Included in the room is a replica, on loan from the Smithsonian, of the original transmitter used in the famous 1920 broadcast.

These items will be on display to the public in the lobby of the Westinghouse Building in Gateway Center (Ft. Pitt Boulevard and Stanwix Street) during November and December. More details will be available at the PARS meet.

Administrative changes**BOARD PROMOTES FURTHER ORGANIZATION**

At the membership meeting of September 8, the Board moved to amend the Society's constitution, increase the Board's size, and form new committees.

Constitution amended

The membership in attendance unanimously voted to accept President Dreyfuss' proposed amendment to increase the Board's size. Article IV was amended to increase the number of Board members from five to seven.

The membership also unanimously voted to accept three proposed new Board members--Paul Eardley, Bob Rockwell, and Dave Stana. The Board now consists of Bill Dawson, Tom Dixon, Sev Dvorsky, Paul Eardley, Laten Fetters, Bob Rockwell, and Dave Stana. (Ray Hill resigned from the Board in August.) Tom Dixon reminded the Board that his term, Sev Dvorsky's term, and Laten Fetters' term all expire in March, 1991.

Committees formed

President Dreyfuss announced the formation of the following committees and named their chairs:

Program--Dick Brewster
 Publicity and Promotion--Dave Stana
 Museum--Rick Harris
 New Members--Bob Rockwell
 Fund Raising--Dick Dreyfuss
 KDKA Anniversary--Rick Harris
 Coordinating--Paul Eardley

Members are requested to contact these committees to volunteer their help.<>

PARS FINANCIAL REVIEW - 1989

[As required by the constitution, the treasurer reports on PARS financial status at each membership meeting. Here is his summary report for 1989.--Editor]

INCOME

Membership dues	\$1210.00
Auctions & Raffles	657.00
Donations	171.79
ARCA Book Sales Percentage	80.00
Club Item Sales	202.00
Un-itemized Meeting -	
September 9	580.25
Balance owed from	
September 9 Meeting	36.00
Over-deposit	<u>10.00</u>
Total	2947.04

EXPENSES

Newsletter Production	\$1495.73
Office Supplies and Postage	581.16
Photographs	85.29
Awards	62.81
Church Rental	50.00
Stipend	50.00
U-Haul Truck Rental	26.94
Refund of Over-deposit	<u>10.00</u>
Total	2361.93

Profit or Loss Statement for 1989

Total Income	\$2947.04
Total Expenses	-2361.93
Profit 1989	585.11
Carryover Cash on Hand	
12/31/88	436.49
Cash on Hand 12/31/89	1021.60

<>

RADIO'S 'GREAT YEARS' REDUX

On Sunday, September 23 at 11 a.m., a new series of programs began airing on radio station WJAS. **The Great Years** was produced by President Dreyfuss. It is must listening for anyone interested in the history of local and national radio programming.

Lots of local radio personalities were on hand with lots of reminiscences. Information on the national level on the segment we heard included behind the scenes news of the firing of Julius La Rosa by Authur Godfrey. Even though La Rosa was fired "on the air" it seems the nation knew of the event before La Rosa did since he did not know the meaning of Godfrey's phrase "swan song".

Various segments of this series were recorded by PARS members. Each broadcast is repeated at 10 p.m. the same day. If you missed any programs, contact David Kraeuter or Richard Brewster to borrow copies of the tapes. We congratulate President Dreyfuss on the production of this series. <>

New electronics looks at old
ANTIQUA RADIO BULLETIN BOARD STARTED

Here is an opportunity for PARS members to take advantage of a free advertising service. We would like to put your ads, (radios for sale, wanted, service, etc.) on our All Antiqua Radio Electronic Bulletin Board.

Your ad in our "Electronic Antiqua Radio Magazine" would expose your message to radio collectors around the country. Collectors who have access to>

a computer and a modem can call our electronic bulletin board and view your ad/list.

Anyone can list their radio items for sale or their services, at no charge, and they won't have to have a computer to participate. There is no limit on ad length. In fact we encourage lists so viewers don't have to send a SASE and wait for a reply. There will be on-going updates; buyers don't have to wait for a monthly publication to see new items.

If you are interested, please write "OK BBS" on your ad/list and sign your name. Mail to the address below.

We are also interested in articles on antique radio or any related subject--collecting, tubes, restoration, radio companies, etc. Text only, no pictures or diagrams. Please make a note of our address as we will not be mailing out additional requests for ads. Send us future ads/lists and articles as they become available. We welcome your ads and will continue to put them on our bulletin board for free.

If you have a modem you can buy, as well as sell, from our Electronic BBS. Our BBS is an "Electronic Magazine" dedicated to antique radios. Subscribers to this BBS will be charged an annual subscription fee. Call for on-line registration. Modem access number is (415) 491-0214, 12 noon to 10 p.m. Wed. through Sun.

Lee and Reggi Allder
 All Antiqua Radio BBS
 PO Box 6735
 San Rafael, CA 94903 <>

BEFORE THE (ELECTRONIC) PARADE PASSES BY
By William (Bill) Johnson, Jr.

Before the public inception of radio into the home our family life was more for the doing than was it for the listening. The evening newspaper's overwhelming Great War dominated the news even as it subsided into peace. At such transatlantic distance it was a grotesque bad dream that ended before many fathers were called to the colors. Local news was more comprehensible through the familiar ways of telephone talk, the upbeat local news Weekly, and even the public notices tacked up on the wooden tellypoles.

The display advertisements in the City's papers included one regularly submitted jointly by the several energetic and foresighted owners of farms then comprising the second hilltop of the British Aurora Plantation south of Fort Pitt, and proclaiming:

COME TO SUNNY DORMONT

On their own, they had no slick and clever developer. As the City's south barrier of Mount Washington had been penetrated by a pioneer streetcar tunnel a new suburb up on our hill might pull away the coal blackened miners who had migrated from north Europe and were burrowing into the bank below from the smokey valley of Banksville, with its coal company houses.

Father, as a teenager, had once operated the little electric engine that pulled the tiny coal cars into and out of the mine. Before the miners could succeed in removing enough coal >

high enough to pull down the good land above, the new suburb was to buy out all the mineral rights and seal the entrances to the mine, past which ran the narrow gauge Pittsburgh and Southern Railway, a coal line that ran down the Banksville Creek valley to Temperanceville (West End) and its barge docks, and up the valley over the ridge and down to the Monongahela River valley's steel mills, plus several daily breathtaking commuter coach runs over steep grades and around precarious curves to the key historical center of Washington, Pennsylvania.

Our family's social and entertainment life at home was thoroughly home made, after our Norse-English and Scotch-Irish traditions, simple that they were:

. . . relatives, a few friends, an artificial Christmas tree with toy electric train beneath, home color-dipping of hard boiled eggs and the Easter bunny's chocolate surprises, home made kite flying in Spring, shooting marbles indoors on the rug, Buckeyes (outdoor competitive horse-chestnut busting on mace-strings), Buck-Buck ("how many fingers up" shouted and gestured by the leader) to culminate a human totem pole acrobatically piled up the side of a tellypole before everyone collapsed from the massed weight, home stitched costumes worn to the hilltop public school for the Halloween contest, powder flash photographs, window rattlers (an empty thread-spool with notched flanges, spun on an old >

lollipop stick by a string that was first wound around the spool, then pulled with a devilish jerk while stealthily holding the spool's teeth against the glass).

. . . a picnic on Labor Day in maternal grandfather's Stevens auto to ancestral graves at Carnot Church just beyond today's Greater Pittsburgh International Air Terminal. Then home again to our little puppy and the huge dog house that he dragged around with his leash;

. . . the mail man, the ice man, the milk man, the baker man, the coal truck for the big house on the corner, the fruit and vegetable man with his singing calls like opera along the street, the bell ringing dingleman with his stool mounted scissors sharpener, the hand cranking organ grinder man with his chattering monkey;

. . . the cistern well of rainwater just outside our back door, the backyard garden and the preserving of its crop in winter jars, the bottling of home made root beer and the weeks of waiting until it aged enough to tingle our noses;

. . . the exchanging of home visits with relatives, the simple dinners and sit-around parties with cake and home made ice cream, the windup phonograph and the next door piano;

. . . the winter heat by flame-licked open gas stoves and the private card club all bent on upward mobility to the exclusive community further out from the City, and from which sunny Dormont had seceded only a few years after the streetcar tunnel came thru;

. . . the new houses under construction, the pungent smell of new lumber and the sinister smell of damp cement, the manure and mud in the street, the boardwalks with hand rail on the street side and community-planted maples all along the other, the yellow street-bricks being hand laid, the sparrows hopping about on their warmth, the dray horses digging their shoe'd hoof-toes into the beveled edges of the bricks for uphill footing as they pulled their loads; the bicycle-perched lamp lighter with his long wand, to be inserted up into the street's lone gas light up on its little pole; in the quiet of evening the rhythmic trot, clop-clop-clop-clop of the horse-doctor returning home on his two wheeled buggy;

. . . the community fire-horn that code-signaled individual streets, the pumper-engine, Mother's shocked scream out the back window at the burning cross on the back ridge at midnight (no small fear for a family named Johnson), the Fourth of July fire-crackers all around, the parade of volunteer firemen and their engine, and of war veterans with their float looking like a war tank, the Community Day down in the park; the (street-) car-line along the near front ridge, the open-sided car and straw hats in summer, the pharmacy with its cigar counter and soda fountain up at the car-stop.

The eerie streetcar ride to downtown Pittsburgh was like a Swiss mountain trail along a razorback ridge and a hillside ledge, and involved six bridges before finally clanging into the City's Golden Triangle, where we found "Child's" gleaming all-white >

tilted restaurant, and across Fifth Avenue to attend a motion picture in the magnificent "Grand" Theatre, which itself was just around the corner from the "Nickelodeon," the world's very first movie house; the scary ride up and down the Mt. Washington Incline to see the City by Saturday's meager night lights under an orange flickered sky above the steel mills. The nauseating late ride home was a slow, moaning grind uphill through the black-dark tunnel, water dripping from its ceiling, unventilated and cave-smelling. It was a witches' brew with the added smells of the sparking carbon brushes and the overheated copper commutators of the streetcar's motors.

There was an occasional auto, and around the City there were the many public ballrooms for romancers, the fervent fans at the ball games, and clusters of them in front of a few Dormont shops, whose enterprising owners telephoned Downtown for ball scores and then chalked them up by innings out front.

There were the family-trade at amusement parks, and the train rides smelling of coal smoke with soot-seeped windows, and an occasional cinder in the eye by the time the family arrived for its vacation; the visits to our maternal grandparents' house nearby, and finally their shiny gray and brown Atwater Kent radio, first with its loop antenna up on top, but soon an outside wire allowed the parchment-coned loud-speaker there; all dominated, controlled, tuned-in, displayed and explained by the awesome uncle, who was already a 1916 pioneer sparkgap radio amateur operator, as he consulted his tuning log and set all three dials to Council Bluffs, Iowa, and sometimes San Francisco, and the shallow tone came out like a >

telephone, but we felt like world class conquerors of distance, time and space.

All of it had been a forceful do-it-yourself pre-electronic lifestyle, put together out of the nothingness of this and that. Have we now invented ourselves out of such odds and ends? <>

PARS WELCOMES THESE NEW MEMBERS

Walter H. Bollinger
169 Mayfair Drive
Pittsburgh, PA 15228
531-1878

Howard Coleman
127 Stotler Drive
Delmont, PA 15626
468-5301

Andy Holovanisin
593 Surfside Drive
Pittsburgh, PA 15239
733-4704

George Kitazawa
926 Harvard Road
Monroeville, PA 15146
372-5458

Jeffrey T. Smith
1265 W. 106th Street, Apt. # 2,
Cleveland, OH 44102.
(216) 651-4762

David J. Stana
200 James Pl. Suite 305
Monroeville, PA 15146
372-8850

WQED-FM
4802 Fifth Avenue
Pittsburgh, PA 15213

A NOTE ON THE AERIOLA JUNIOR

Who designed the Aeriola Junior, and why was it designed as it was?

A Frank Conrad patent provides some answers. In the patent Conrad states: "One object of my invention is to provide a cabinet of simple, compact and rugged design adapted to embody a complete radio receiving set which is characterized by its extreme simplicity of operation and the absence of complicated adjustments.

"Another object of my invention is to provide a wireless receiving set of such design as to admit of inexpensive quantity production with existing manufacturing methods.

"Still another object of my invention is to provide a receiving system embodying antenna and detector circuits wherein extremely sharp tuning of the antenna circuit may be effected without decreasing the efficiency of the detector circuit."

Aeriola Junior owners, why not dust off the beast, hook it up, and get a little closer to some local radio history?

March 27, 1928.

1,664,192

F CONRAD

WIRELESS RECEIVING SET

Filed July 11, 1922

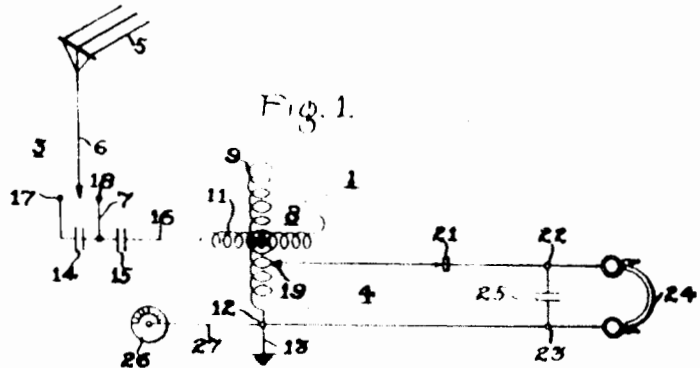


Fig. 2.

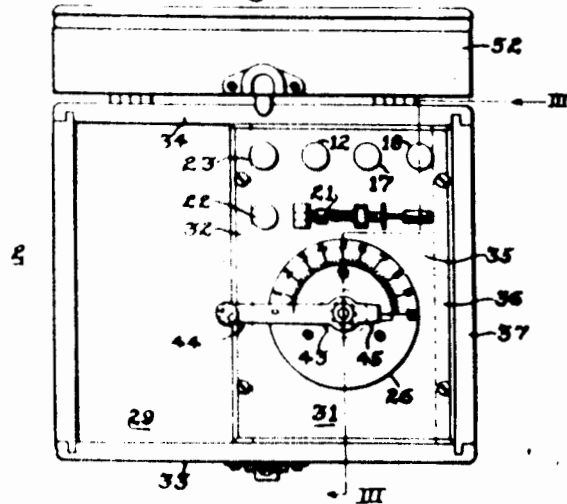
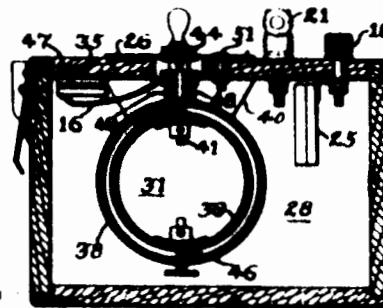


Fig. 3.



WITNESSES
A. J. Butler
H. L. Goodfellow

INVENTOR
Frank Conrad.
BY
Walter Blair
ATTORNEY

WHEN I WAS YOUNG
BY Raymond M. Bell, ex W3FUU

There were few radio stations - all on amplitude modulation.

Wavelengths were in meters. KiloHertz was unheard of.

Stations had no crystal control - there were lots of heterodynes.

Power was low - in kilowatts - often in watts.

A lot of the reception was by sky wave-causing lots of fading. Automatic volume control was yet to come.

Stations put out lots of harmonics at shorter waves, increasing the range.

There were not many daytime programs - there was nothing to be heard after midnight.

Stations were operated by radio manufacturers, department stores, newspapers, colleges, churches.

There were no networks - no commercials.

Entertainers were not paid; programs were live.

Little news was broadcast; records were not played.

Church services and sporting events were good broadcast material.

Receivers had to be calibrated; dial settings varied from day to day.

Headphones were used a lot; a few persons had loud speakers. >

The super-het had not been invented; regeneration was used.

The volume was controlled by the voltage to the filament of the tube.

Batteries were used - no hum; AC sets were yet to come.

Sets were not shielded; putting your hand toward the dial changed the frequency. The trick was to set the dial so that when your hand was removed the station was centered.

Stations did not broadcast every night; programs were not regular.

But those were exciting times; it was great to be a pioneer. <>

ADSADSADSADSADSADSADSADSADSADSADSADSADSADSADS

WANTED: EH Scott (1931-1941), Scott Transformer Co. (1928-1930), World's Record (1925-1927), Zenith Stratosphere and Crosley WLW radios and literature. Jim Clark, 1292 Starboard, Okemos, MI 48864. (517) 349-2249.

WANTED: Coil Winding Machine and Rider's Volume 23. Also Rider's "Automatic Record Changers and Recorders" and "Most Often Needed Radio Diagrams" by Supreme Publications. Also schematic for National Model # NC-155. Healy, PO Box 764, Woodacre, CA 94973, (415) 488-4596.

FOR SALE: 1930 RCA RE-75 Victor console radio/record player, \$150, buyer picks up. R. Keenan, (412) 948-3745. <>

Maps to Frank Conrad's House at the Wilkinsburg Elks
 (Maps and directions courtesy of Richard J. Harris, Jr.)

1. FROM THE NORTH:

Take I-79 south to Rt. 279 (Parkway West). Travel east following signs for "Route 376 Monroeville." Exit at the Wilkinsburg exit. See detail map.

2. FROM THE SOUTH:

Take I-79 north to Rt. 279 (Parkway West). Follow directions (1) above.

3. FROM THE WEST:

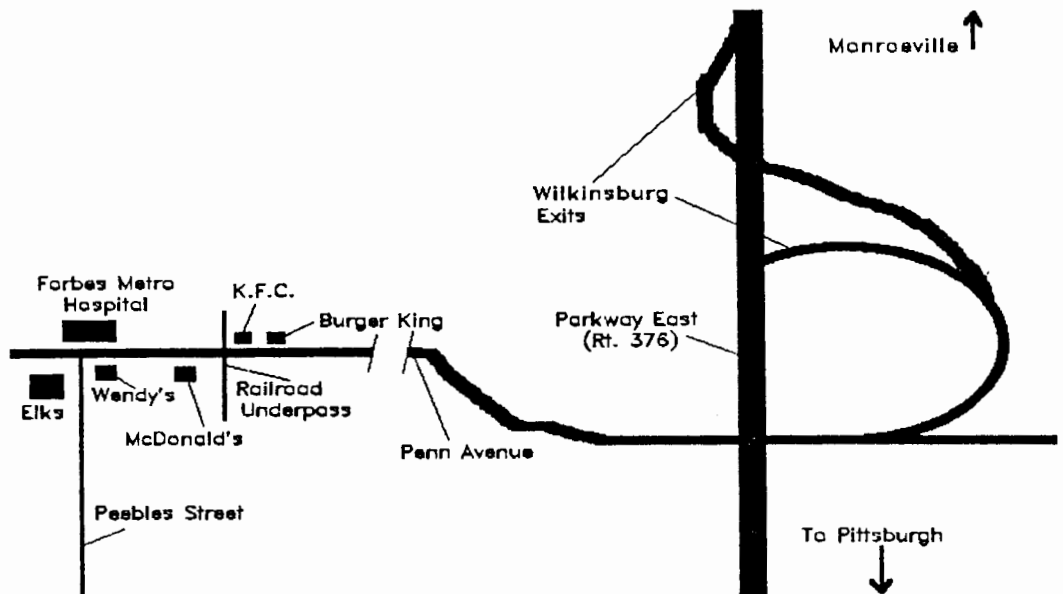
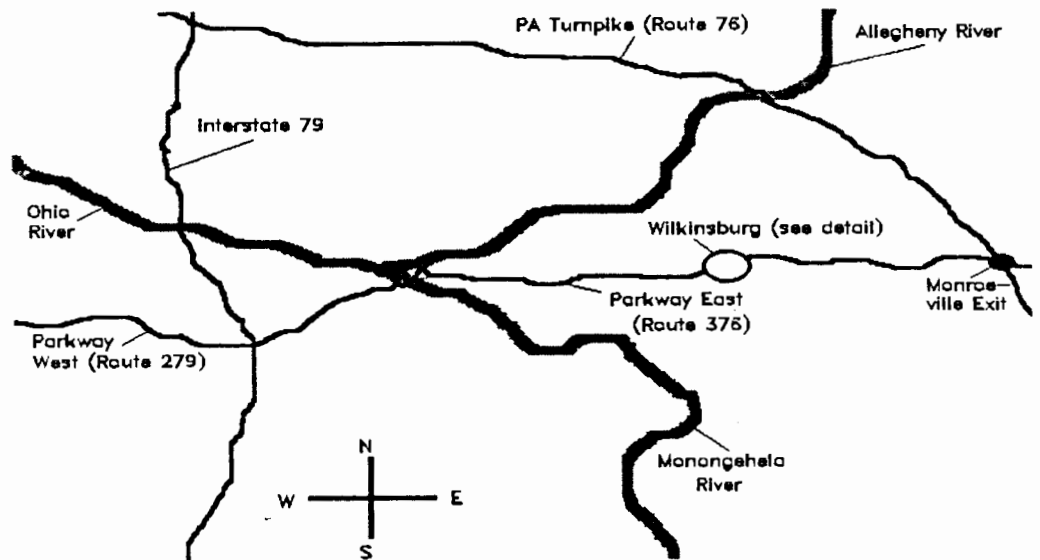
Travel east on Rt. 279 (Parkway West). Follow directions (1) above.

4. FROM THE EAST:

Take PA turnpike (Rt. 76) west. Exit at Monroeville exit. Travel west on Rt. 376 (Parkway East) toward Pittsburgh. Exit at Wilkinsburg exit.

AFTER LEAVING THE PARKWAY at the

Wilkinsburg exit, continue straight ahead (no turns) for 1.6 miles to the Wilkinsburg Elks.



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