

THE ZARC CARRIER



The Newsletter of the Zanesville Amateur Radio Club

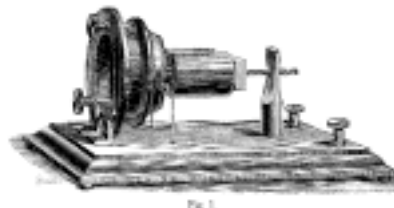
News and Entertainment by Telephone (1876-1925) Pt. 1

By Thomas H. White

While the telegraph was mainly limited to transmitting Morse Code and printed messages, the invention of the telephone made distant audio communication possible. And although the telephone was mostly used for private conversations, there was also experimentation with providing home entertainment. In 1893 a particularly sophisticated system, the *Telefon Hirmondó*, began operation in Budapest, Hungary -- one of its off-shoots, the *Telephone Herald of Newark, New Jersey*, did not meet with the same financial success.

ELECTRIC TELEPHONE

In 1946, William Peck Banning wrote that "historians of the future may conclude that if there was any 'father' of broadcasting, perhaps it was the telephone itself". After the invention of the telegraph, numerous inventors worked to transmit audio along wires, initially with limited success. The first to finally achieve quality sound reproduction was Alexander Graham Bell -- Bell's Articulating Telephone from the 1876 edition of the annual *Journal of the Society of Telegraph Engineers* introduced the invention to British readers. (This review noted that "one cannot but be struck at the extreme simplicity" of Bell's invention, and eventually home telephones became easy enough to use so that a four-year-old could operate one, as reported in "Children Cry For It" from the March, 1908 *Telephony*.)



The development of the telephone in the 1870s and 1880s included adapting it to distribute entertainment and news. In the January, 1908 issue of *Telephony*, C. E. McCluer reviewed some of his early experiences, including hearing experimental musical concerts in 1876, which were transmitted along commercial telegraph lines for the entertainment of the operators on the wire, as recounted in *Telephonic Reminiscences*. At the 1881 Paris International Electrical Exhibition, Clément Ader demonstrated the transmission of music from local theaters using telephone lines. Ader's use of dual lines also introduced the phenomenon of stereo listening -- at the time referred to as "binauricular audition" -- reviewed by *The Telephone* at the Paris Opera, which appeared in the December 31, 1881 issue of *Scientific American*. Edward Bellamy's influential 1888 utopian novel, *Looking Backward: 2000-1887*, included a future where, via telephone lines, individual homes had access to music 24-hours a day. A couple years later, an American Telephone and Telegraph Company executive, in *Extension and Improvement of Telephone Service* from the September 20, 1890 *The Electrical World*, reviewed efforts to establish a mealtime music service, noting that while there were problems with the sound quality, they were hopeful that "When we have overcome this difficulty we shall be prepared to furnish music on tap." (While most were intrigued by this possibility, not everyone was favorably im-

Continued on page 4

Differences: Men Vs. Women

NICKNAMES

- If Laura, Karen and Sarah go out for lunch, they will call each other Laura, Karen and Sarah.
- If Mike, Dave and John go out, they will affectionately refer to each other as Fat Boy, Godzilla and Four-eyes.

EATING OUT

- When the bill arrives, Mike, Dave and Dan will each throw in \$20, even though it's only for \$32.50. None of them will have anything smaller and none will actually admit they want change back.
- When the girls get their bill, out come the pocket calculators.

MONEY

- A man will pay \$2 for a \$1 item he needs.
- A woman will pay \$1 for a \$2 item that she doesn't need but it's on sale.

BATHROOMS

- A man has six items in his bathroom: toothbrush and toothpaste, shaving cream, razor, a bar of soap, and a towel .
- The average number of items in the typical woman's bathroom is 337. A man would not be able to identify more than 20 of these items.

ARGUMENTS

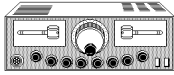
- A woman has the last word in any argument.
- Anything a man says after that is the beginning of a new argument.

FUTURE

- A woman worries about the future until

Continued on page 4

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THE ZARC CARRIER

The Zarc Carrier is the newsletter of the Zanesville Amateur Radio Club, located in Zanesville, Muskingum County, Ohio and is published January, March, May, July, September, and November.

Send in your items of ham related interest, such as swap n shop ads, new hams in the area, birthdays, anniversaries, silent keys, ham fests, special events, and original written articles. Deadline is the first of the month before the month to be published. Enclose a SASE if your material is to be returned to you.

Any material in *The Zarc Carrier* may be reprinted as long as you give credit to the newsletter, the original author, and the original publication, if given.

Sample copies are available upon request and a SASE. If your club receives a complementary copy of *The Zarc Carrier*, we would appreciate a copy of yours in exchange.

ZARC MEMBERSHIP

The Zanesville Amateur Radio Club is an incorporated not-for-profit association. Membership is open to anyone interested in the purposes of the organization and who agrees to abide by the by-laws and other rules and regulations that may, from time to time, be established by ZARC.

ZARC Membership Application

Date New Membership Renewal

Name Call Sign

Address

City, St, Zip

Phone ARRL Member - Yes No

Prorates apply to new memberships only. Jan-Mar Apr-Jun Jul-Sep Oct-Dec

- Full (*Licensed Amateur*) ... 20.00 ... 15.00 ... 10.00 ... 5.00
- Family (*Of Full member—Licensed Amateurs—1st person, then \$5.00 for balance of family*) ... 10.00 ... 7.50 ... 5.00 ... 2.50
- Junior (*Licensed Amateur, 16 yrs. old or younger, still in school, not in same household as Family member*) ... 6.00 ... 4.50 ... 3.00 ... 1.50
- Associate (*Un-Licensed*) ... 10.00 ... 7.50 ... 5.00 ... 2.50

If Family Membership, Name and Call Sign of Full Member:
.....

E-Mail Address

Share E-Mail Address With: Members Only Anyone No One

Send ZARC CARRIER by: E-Mail (Adobe) USPS

Make check or money order out to ZARC and mail to:

Don Wahl, WA8BOV, ZARC Treasurer, P. O. Box 8203, Zanesville, Ohio 43701-8203



ZARC Net Control Stations

The Zanesville Amateur Radio Club 2 meter net meets every Wednesday night at 9 PM on 146.610 PL 74.4. The PL and time out are off during the net. All licensed Amateur Radio operators are welcome to check in.

September 2008

3rd Mary Grandstaff, KB8ZXH
 10th Open
 17th Danny Grandstaff, KB8RIM
 24th Open

October 2008

1st Mary Grandstaff, KB8ZXH
 8th Open
 15th Danny Grandstaff, KB8RIM
 22nd Open
 29th Open

Any ZARC club member is welcome to take an *Open* week as net control. Let me know that you are interested and I will see that you get a copy of the ZARC Net Preamble and assign you a Wednesday. Danny Grandstaff, KB8RIM, zcw8zzv@prodigy.net or 740-453-0400.

The Armstrong Radio Repeater System

	Licking County	Muskingum County	Guernsey County	Perry County
VHF	146.835	147.075	147.000	146.820
UHF	443.925	442.250	444.375	none
PL	91.5	91.5	91.5	100.0

Printing Donated by:

Dan's Barber Styling

819 Linden Ave.,
 Zanesville, Ohio

The Fix It People! Communications Electronics

2617 Palmer Rd.
 Hebron, Oh 43025
 740-929-2500

In days of old when a man was told
 To publish a decree,
 He hopped a steed and put on speed,
 As quickly as could be.

He rode about and shouted out,
 The things he had to tell,
 And if a hundred men were thus informed
 He was doing very well.

But that crude way would never pay
 In these more modern times,
 When one may preach and his voice
 reach
 A dozen different climes.

A little spark comes through the dark
 Upon a little wire,
 Its meaning read and the news is spread
 That set the world afire.

Area 2 Meter Nets

Sunday

147.045 Coshocton 9 PM

Monday

146.730 New Philadelphia 8 PM
 147.030 Lancaster 9 PM
 145.230 Coshocton 9 PM

Tuesday

146.760 Columbus 7:30 PM
 146.850 Cambridge 8 PM & 8:15 PM
 146.670 Millersburg 9 PM
 146.880 Newark 9 PM

Wednesday

147.345 Logan 8:30 PM
 146.610 Zanesville 9 PM
 147.210 Wooster 9 PM

Saturday

* New Lexington 8 PM
 * © Multi-County Coalition 9 PM
 * The Armstrong Radio Repeater System
 © Alternate Frequency 146.610

Other Area Nets

Daily

147.240, PL 179.9 Columbus 7 PM

Wednesday s

1st - 8:30 PM 146.460
 2nd - 8:30 PM 52.540 Simplex
 3rd - 8:30 PM 28.390 SSB
 4th - 8:30 PM 24.980 SSB
 5th - 8:30 PM Wildcard
 (Any of the above)

Thursday

ZARC Six Meter Net 9 PM
 51.135 FM Simplex

Friday

Johnny Applesced 9 PM
 28.450 USB

Multi-County Coalition N C S

First Sat. - Licking County
 Second Sat. - Guernsey County
 Third Sat. - Muskingum County
 Fourth Sat. - Open
 Odd Fifth Sat. - Coshocton County



ZARC Meeting Place

From Rt. 40 at Pleasant Grove Rd. go north (Rt.93) on Pleasant Grove Rd. 1.1 mile, turn left on Adamsville Rd. and go about 0.3 mile. You will see a building on the right with multi antennas. Stop here. Coming from Underwood St. go north on Hall Ave. from the traffic light about 2.5 miles and the building is on the left.

Telephone *From page 1*

pressed, and in the same issue of the magazine a reviewer warned of the potential intrusiveness of the idea, fearing "a vista of dreadful possibilities" that might "make incipient deafness bliss", in Music on Tap.) In the October 9, 1890 *The New York Times*, Music Over the Wires also reviewed AT&T's development plans, with hopes that ultimately "the lines used in the daytime for business affairs will at night carry music, lectures, and various oral entertainments to all the cities of the East". Arthur Mee, in the September, 1898 *The Strand Magazine*, suggested in The Pleasure Telephone that a telephonic entertainment system, operating throughout Great Britain, had the potential to "make millions merry who have never been merry before" and would revolutionize British society, to "make all classes kin".



In spite of the varied attempts to set up telephone-based news and entertainment services, none achieved long-term success in the United States. The major problem was weak signals, for until the mid-1910s there were only very limited means for quality amplification. In the May, 1916 *The Electrical Experimenter*, Hugo Gernsback's What to Invent--Tele-music predicted that "An 'industry' rivaling the moving picture business can be created when some genius perfects a means supplying telephone subscribers with all kinds of music". Actually, at the time this article appeared, most of the needed technical advances were already in place, for AT&T engineers, lead by Dr. Harold Arnold, had recently taken Lee DeForest's crude Audion amplifier and perfected it into a much more effective device, making possible more sensitive microphones, quality line amplification, and better loudspeakers, that finally made the establishment of home entertainment distributed by telephone-lines practical. In view of these advances, in the April, 1919 *Electrical Experimenter* Gernsback returned to the topic of entertainment by telephone distribution, predicting in Grand Opera in Your Home that individuals would now welcome "spending 50 cents or even a dollar for the privilege, and at that he would think he was getting it cheap because he, with his entire family, would hear the music in his own home without having to travel to and from the opera". But, ironically, the same vacuum-tube advances that made telephone-based services practical also doomed them, because an additional development, vacuum-tube radio transmitters, also made radio broadcasting practical, with the added benefit that programs could be more widely distributed at minimal cost.



Meanwhile, Well Clay, blissfully ignorant of the radio broadcasting boom already beginning to gain momentum, mused in the July 9, 1921 edition of his weekly *Telephony* column, Sundry Snapshots Along the Trail, about the possibility of using telephone lines to distribute concerts to regional audiences. Even more exuberant was AT&T engineer R. W. King, interviewed in the December 11, 1921 *The New York Times*, who, after reviewing the nationwide telephonic links that were now possible, was moved to Predict Audiences of 50,000,000 Soon for telephonic distribution, although most of the audience would be located in scattered auditoriums. The February, 1922 *Science and Invention* covered the same topic in If President Harding Spoke to 120,000,000 People, noting and illustrating the fact that President Harding would have to grow to a monstrous height of 173 feet (53 meters) if he wanted to personally address this massive audience, instead of using the more practical system of vacuum tube amplifiers and telephone lines. However, in the end, instead of auditoriums, the long-distance telephone lines would actually be used to link radio stations together, to form national networks that allowed citizens to listen to the distant speeches in the comfort of their own homes.

PARIS THEATROPHONE

Although most of these early entertainment and news efforts were experimental or one-time-only events, a few on-going services were established, mostly in Europe. The first permanent telephone-based entertainment service, which grew out of Clément Ader's earlier work, appears to have been the *Theatrophone*, organized in Paris in 1890. A short note in the August 30, 1889 *The Electrical Engineer*, Theatrophone, reported on plans to build the system for Parisians and make it attractive enough to "catch their ears and their centimes". The Theatrephone in the June 21, 1890 *Electrical Review* briefly noted that the new service was now close to being put into operation, and a first-hand account of the innovation appeared in the August 29, 1891 issue of

Differences *From page 1*

she gets a husband.

- A man never worries about the future until he gets a wife.

SUCCESS

- A successful man is one who makes more money than his wife can spend.
- A successful woman is one who can find such a man.

MARRIAGE

- A woman marries a man expecting he will change, but he doesn't.
- A man marries a woman expecting that she won't change, but she does.

DRESSING UP

- A woman will dress up to go shopping, water the plants, empty the trash, answer the phone, read a book, and get the mail.
- A man will dress up for weddings and funerals.

NATURAL

- Men wake up as good-looking as they went to bed.
- Women somehow deteriorate during the night.

OFFSPRING

- Ah, children. A woman knows all about her children. She knows about dentist appointments and romances, best friends, favorite foods, secret fears and hopes and dreams.
- A man is vaguely aware of some short people living in the house.

THOUGHT FOR THE DAY

A married man should forget his mistakes. There's no use in two people remembering the same thing!

Did You Know?

Microwaves are radio waves of a specific frequency that are absorbed by water, fats and sugars—but not by most plastics, glass and other ceramics. Once absorbed, the waves move molecules, which creates friction, which creates heat, which cooks food.

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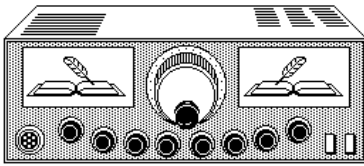
**ZARC 2008
FIELD DAY
GALLERY**



STATE



COUNTY



From the Secretary

ZANESVILLE AMATEUR RADIO CLUB

Zippo Gillogly
K8CYN

Date: 3 June 2008 at Time: 7:00 PM at Location: Muskingum Co. EOC

Attendees:

(11) KA8UXT, N8KBR, WA8BOV, KA8UWO, N8IMW, W8FHF, AC8AD, WA8BNS, KB8JVP, KD8HWG, N8LJF

Minutes:

- President Joe, KA8UXT, called the meeting to order.
- Secretary's Report - Minutes of the 6 May 2008 Meeting were read by Vice-President Earl, N8KBR. Copies were passed around. Minutes were approved as read.
- Treasurer's Report - The Treasurer's Report was provided by Don, WA8BOV. Balance as of the meeting was \$590.43. Report was approved as read.

Old Business -

- Joe, KA8UXT, mentioned he has built cabinets for equipment setup at the Washington Twp. Fire Station. Continuing efforts will be required for the Antenna(s) and Tower at the station.
- Field Day is coming up 28 & 29 June 2008. Phil, KB8JVP, confirmed reservation for the Putnam Hill Park for our site again. Further Field Day discussion involved determining who was bringing needed items for Field Day Stations. Walter, KD8HWG, will make contact with the Commissioners and Mayor. Earl, N8KBR, will initiate contact and arrangements with Media outlets. Joe, KA8UXT, will bring power cords and coordinate getting the Club Station to the site. Earl, N8KBR, will bring a generator, 12' x 20' shelter, a complete HF station, and bring materials for the information table. Lyn, N8IMW, indicated that she would send two tables, some chairs, and the ZARC brochures with Dwight, W8TJT.

New Business

- Joe, KA8UXT, reported having a conversation with Zippo, K8CYN, where Zippo has asked to resign the post of Secretary. Also, Joe indicated that it was his understanding that Zippo no longer wanted to serve as Trustee of the 146.61 Club Repeater. Earl, N8KBR, indicated that he could continue to take notes at meetings until a Secretary could be recruited but one would need to be recruited before the end of the year because Earl's services would cease at the end of the year. After some additional discussion, Earl, N8KBR, moved that Joe, KA8UXT, ask Danny, KB8RIM, if he would be agreeable to using the W8ZZV call sign on the repeater in the event it is confirmed that Zippo can no longer serve as trustee. In the mean time, there was discussion related to establishing a standing committee to support the repeater trustee with repeater maintenance. Those at the meeting indicating an interest were Phil, KB8JVP, Sonny, W8FHF, Don, N8LJF, Harry, WA8BNS, and Patrick, AC8AD.
- Some discussion regarding activity and plans at the Washington Township Fire Department

Adjournment

- After a unanimous motion for Adjournment, the Meeting was adjourned. After adjournment of the meeting there was a program involving a site visit and tour at the Washington Township Fire Department.

Telephone *From page 4*

the same magazine, reporting that The Theatrophone in Paris was "certainly more amusing than the weighing machines and pull-testers that so overcrowd our waiting-rooms everywhere". The Theatrophone section of Charles Henry Cochrane's 1896 book *The Wonders of Modern Mechanism* reviewed the system's organization, which allowed individual subscribers to choose which theater programs they wished to listen to.

BUDAPEST TELEFON HIRMONDÓ

However, the most influential telephone-based service would be the *Telefon Hirmondó*, set up by inventor Tivadar Puskás in Budapest, Hungary, which began operation on February 15, 1893, just a month before Puskás died at the age of 49. (A short note in the May 12, 1893 *The Electrical Engineer* announced the untimely passing of an inventor who had hoped to one day "arrange a telephone system to be heard by millions of speakers at once".) Two early reviews of Puskás' innovation appeared in *The Electrical World: Telephonic News Distribution* in the March 18, 1893 issue, followed by *Telephone Newspaper* on November 4, 1893. Two years later, a detailed review of its operation, *The Telephone Newspaper*, ran in the September 6, 1895 *The Electrical Engineer*, with the author noting that the service, featuring continuous news reports, plus entertainment, including original fiction sometimes read by the authors themselves, was considered "almost indispensable" in the capital, although "the idea had encountered considerable ridicule" at first. In contrast, in an early attack on the electronic media by the written press, the September 28, 1895 issue of *Harper's Weekly* opined that "If all this really happens at Pesth, and not in the moon" then "Pesth must be the finest place for illiterate, blind, bedridden and incurably lazy people in the world" and "it would not appear, however, that a telephone newspaper is of value as a time-saving device". (In its October 23, 1907 issue, the London humor weekly *Punch*, in *Warning to Fleet Street*, speculated about the name changes that the British press would have to undergo -- for example, the *Daily Mail* would become the *Daily Wail* -- should papers be forced to convert into audio services.)

Thomas S. Denison's *The Telephone Newspaper*, from the April, 1901 edition of *World's Work*, reported in detail on a personal visit to the *Telefon Hirmondó's* offices. Frederick A. Talbot's article about Budapest's "newspaper of the future", *A Telephone Newspaper*, appeared in the August 8, 1903 issue of *The Living Age*, and in 1908 W. B. Forster Bovill wrote about a first-hand encounter with the service in a hotel in Hungary and the Hungarians: *Telephon Hirmondó* extract. Meanwhile, in the May, 1904 issue of *Telephone Magazine*, Dr. Alfred Gradenwitz wrote about an idea that Danish inventor Valdemar Poulsen had proposed about The Use of the Telegraphone in Telephony, suggesting that "a special application" of his recently invented magnetic wire-recorder would be to continuously repeat news and music transmissions for telephone newspaper subscribers. Over the years, the existence of the *Telefon Hirmondó* was constantly being rediscovered. Why I Believe in Government Radio--Hungary's "Telephone Newspaper", from the October, 1922, *Popular Science Monthly* reviewed Robert B. Howell's impressions of the now 28-year-old service.

LONDON ELECTROPHONE

In 1895, another telephone-based system was established, in London, England, organized along the lines of the Paris *Theatrophone*. A technical overview of The Electrophone, by J. Wright, appeared in the September 10, 1897 *The Electrical Engineer*, which noted that "one can sit comfortably at home in all weathers and listen to the latest comedy, opera, or tragedy, as the case may be, by the payment of a purely nominal rental". The service soon claimed Britain's Queen Victoria as a listener, according to The Queen and the Electrophone, from the May 26, 1899 *The Electrician*. In the October 5, 1901 *Electrical Review*, Electrophone in England reported that "the popularity of the electrophone is increasing", with a decrease of the subscription charge from \$50 to \$12 per year. The August 5, 1898 *The Electrical World* reported that the company was in the process of installing receivers at "the principal hospitals free of charge, beyond the cost of installation". And two decades later, the same free service was provided to some jolly chaps photographed recuperating in a London hospital, as reported in British Wounded Hear London's Favorites via Telephone, which appeared in the August, 1917 *The Electrical Experimenter*. In early 1923, there were report-



The Hospital of London, England, is fitted with special telephone instruments so that the wounded soldiers can, as they lie in bed, listen to the latest music played from the theaters and music halls. See the "Mecor" Stage 5.

Garfield On The Oil Crisis



A lot of folks can't understand how we came to have an oil shortage here in our country.

Well, there's a very simple answer.

Nobody bothered to check the oil.

We just didn't know we were getting low.

The reason for that is purely geographical.

Our OIL is located in:

ALASKA

California

Coastal Florida

Coastal Louisiana

Wyoming

Colorado

Kansas

Oklahoma

Pennsylvania

And Texas

Our dipsticks are located in DC



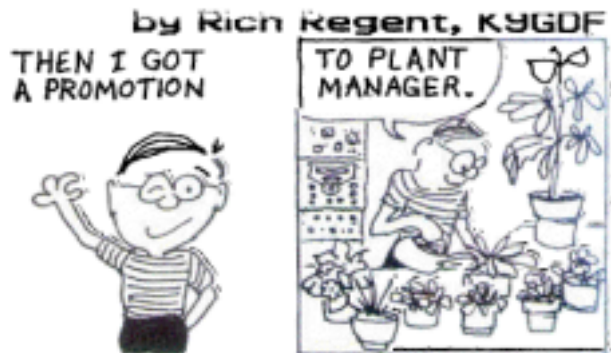
Continued on page 8

Telephone *From page 7*

edly around 2,000 *Electrophone* subscribers in the London area, and Entertainment by Wire- less: The Future of the Electrophone from the January 10, 1923 *London Times* speculated about the effect the introduction of organized radio broadcasting would have on the service. Although a company director was reported to be optimistic, in truth the *Electrophone* service was doomed, and two years later its thirty-year run came to a close. Not that it would be un- missed -- years later a nostalgic review in the May 9, 1957 *London Times*, Theatre-Going By Telephone, remembered that "There was something very satisfying about listening to a live broadcast from a real theatre, by actors and actresses playing to and having contact with their own audiences" which radio and television broadcasting could not match. And in the mid-1920s a new service arose in numerous British towns, "wireless relay exchanges", where sub- scribers could listen to radio broadcasts, received at a central location, over telephone lines, avoiding the need to purchase an expensive radio receiver.



Be here next issue for part 2.



Cambridge Amateur Radio Association

Hamfest and Computer Show

When: Sunday, August 24, 2008
 Where: Pritchard Laughlin Civic Center
 Cambridge, Ohio 43725



Grand Prize
 2 Meter Mobile

Setup Begins @ 7:00am
 Doors Open @ 8:00am until 2:00pm

Admission: \$5.00
 Tables: \$10.00

Free Outdoor Tailgating (Weather Permitting)

ARRL VE Session @ 12:00 NOON
 All Classes... Walkies Welcome

Talkin' 146.850 91.5Hz Tone Repeater

For More Information Contact Russ Ellis
 (NSWVK) @ 740-767-2226 or 740-439-6610

NSWVK@ARRL.NET



Door Prizes

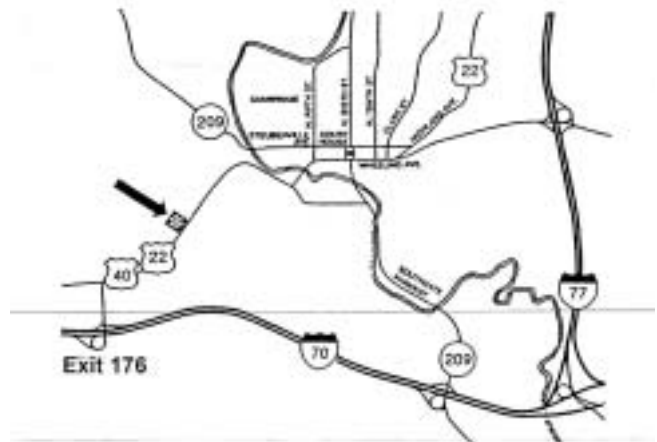


Food Stand



Pritchard Laughlin Civic Center

PO Box 548
 7033 Glenn Highway
 Cambridge, OH 43725
 740-439-7009



Exit 176 off I-70,
 Go to Stop Light, Make a Right
 PLCC is 0.7 mile on Left side of Road

From Wheeling: Go West on I-70 to Exit 176
 From Columbus: Go East on I-70 to Exit 176
 From Marietta: Go North on I-77 then West on I-70 to Exit 176
 From Canton/Akron: Go South on I-77 then West on I-70 to Exit 176

*SMILE.....
It's catching*

This girl I know lives on the 4th floor of an apartment, and even though it is a fairly good neighborhood, she has been having trouble with a Peeping Tom that lives next door...

Every time she goes out on her balcony to catch a bit of sun while wearing her bikini, this Peeping Tom looks over from his balcony and stares at her...



WHAT PART OF QUIET
DIDN'T YOU UNDERSTAND?



A little power nap...



OK, NOW DONT MOVE FOR
ABOUT A WEEK!



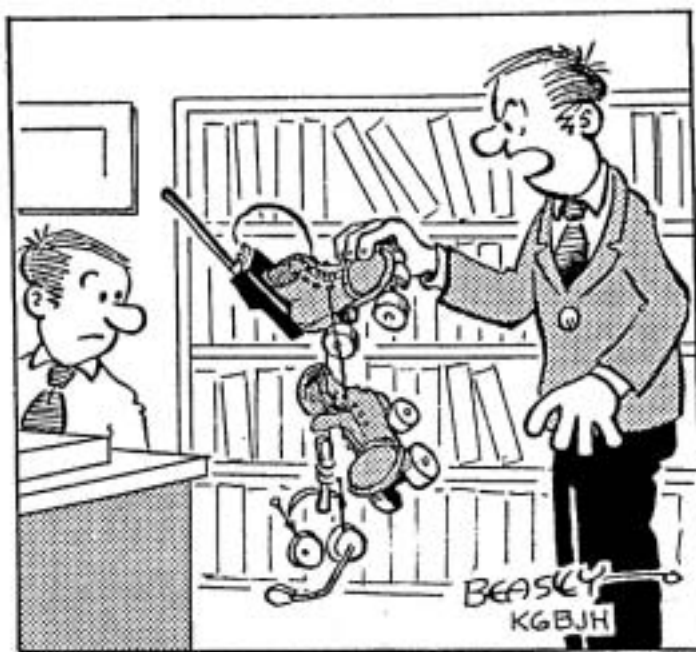
THE ZARC CARRIER

Danny Grandstaff, KB8RIM
2422 Marion Ave.
Zanesville, Oh 43701

CLUB MEETING:
First Tuesday of each month 7 pm
EOC Building
Adamsville Rd.
Zanesville, Ohio
ZARC Packet Station 144.910

UNDER THE COVERS

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I TOLD THE BOSS I WANTED SOME COMPANY WHEELS SO I COULD OPERATE MOBILE TO AND FROM WORK!