



Dial Log



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Jody Georgeson, editor.

Director's Message

I am excited to tell you about an opportunity the Telecommunications History Group had recently, as we wind down the summer season. We were asked by Level 3 Communications to participate in a video series entitled Delivering Democracy – The Intersection of Politics and Tech. This series explores how technology has played an important role in the political process and in shaping democracy. Some of our expert volunteers provided interesting insights on the technology of the 1908 Democratic convention, how the transatlantic long distance and TV lines made politics more accessible, and how fiber revolutionized political newsgathering. We will be putting the videos on our website soon, but in the meantime you can view them on YouTube by searching for Level 3 Communications – Delivering Democracy.

Through our participation in events like Seafair (*see page 4*), Doors Open Denver and National History Day Colorado, the word is getting out about our organization and we are being asked to give group tours of our museum and archive. We recently hosted Communication graduate students from the University of Colorado Denver and are working with UCD, as well as University of Denver, to offer internships at our Denver location. We enjoy exploring opportunities to work with academic institutions to educate students on the history of telecommunications.

If you would like a tour or want to volunteer at THG, please contact us at 303-291-1221 for our Denver location and 206-767-3012 for our Seattle location.

Warm regards,
Lisa Berquist

Original Senders for the Museum's No. 1 Crossbar

By Sarah Autumn

“There's no more of those left in the world!”

Here in Seattle's Museum of Communications, we're honored to be the caretakers of some of the last remaining 20th century automatic telephone switching machines in existence. Among other working exhibits, our 1923 Panel office, and our 1941 No.1 Crossbar office stand out as the only ones left out of hundreds, maybe thousands, which were once installed in cities across the country.

A primary goal of the museum is to preserve these machines for future generations. Our all-volunteer staff maintains the switches and conducts tours for our guests. There is no shortage of work to be done! Besides regular maintenance and repair, we are always striving to restore as much of the original appearance and functionality as possible, and to provide an accurate and educational experience for visitors.

This Spring an exciting new project made its way to us and we are now eagerly working to get it ready for public display. I can feel the excitement in the air and I'd like to share some of that feeling with you.

My specialty at the museum is our Panel switch. Truly a one-of-a-kind machine, it has captivated me and I have dedicated myself to caring for it. Our particular Panel was installed in Seattle's "RAinier" central office in 1923. It has the distinction of providing the very first dial tone in the whole city. With other offices throughout Seattle, it served faithfully until its replacement in 1972.

Despite our best efforts, we have sadly not been able to get our Panel switch to connect calls to the No.1 Crossbar. Though the Crossbar initially operated alongside Panel offices, our switch does not include the correct type of "senders" to allow it to receive calls from the Panel. It's almost as if the two switches speak a different language. After researching this, I arrived at the conclusion that it was very unlikely that communication would ever be restored between these two systems. Finding original senders was all but hopeless, and building one from parts would be so difficult as to be out of the question.

That all changed one night when I made a call to a fellow telephone enthusiast. After chatting for a while, he suggested that a telephone collector in Connecticut might have the parts I was looking for.

“Connecticut?! You've got to be kidding me. Where?”



Senders mounted to framework in Jim's warehouse

I grew up in Connecticut and I couldn't believe that this could have been right under my nose for most of my life! He gave me the name and number of a fellow named Jim and told me to give him a call. I immediately called my friend and fellow volunteer, Astrid, to tell her the news. We shared a mix of excitement and disbelief. After all, it was almost impossible that someone would have this very particular item and know what it was originally used for. Perhaps it was even more unlikely that this large, heavy and delicate apparatus was still in good condition.

After a few days I was able to speak with Jim, the owner of the senders. He confirmed that he did indeed have a few that he had recovered from a central office in New York and that he would be willing to donate them. I worked out a date with him and began planning our trip to the east coast.



3 senders in the van as Astrid gives the "thumbs up"! (We gave them more padding before driving away.)

When we got to Jim's warehouse and saw the senders for the first time, we were beside ourselves. We felt like archaeologists discovering a rare, priceless artifact thought to be lost forever! Jim ended up donating a total of three items: two terminating senders and one original style flat-spring subscriber sender. He kindly helped us load them into the car and gave us a thorough tour of his massive collection of telephone equipment. For a telephone geek, it was truly a once in a lifetime experience!

Astrid flew back to Seattle the following day and I began my cross-country trip in the rental minivan. No stranger to long trips, I thoroughly enjoyed being on

the open road. The drive back home was comfortable and I got to spend plenty of time enjoying the sights.

Now that the senders are safely back to the museum, the volunteers are working together to clean them, run new wiring and prepare the No.1 Crossbar to receive them. It's heartwarming to see everyone working together on this new and exciting project! We anticipate it will still be months before the equipment is fully installed. There is quite a lot of work ahead of us, but we are optimistic and we always love a challenge. The first call between the Panel switch and the No.1 Crossbar will be an exciting event indeed!



Volunteer Les Anderson works on the rear side of a terminating sender.



Cleaning the 2nd terminating sender

Volunteer/ author Sarah Autumn prepares a new trunk in the Panel office. (Maybe she should watch the soldering iron!)



Stay tuned for Part 2 of the story as the project continues!

Seafair



Seafair is a summer festival in Seattle, Washington that encompasses a wide variety of small neighborhood events leading up to several major city-wide celebrations. While many small block parties and local parades occur under the auspices of Seafair, most Seattle residents associate Seafair with the Torchlight Parade (and accompanying Torchlight Run), Seafair Cup hydroplane races, and the Blue Angels. Seafair has been an annual event in Seattle since 1950 but its roots can be traced to the 1911 Seattle Golden Potlatch Celebrations.

This year the Seafair event was called "The Jet Blast Bash" and was held Aug 5th, 6th, and 7th and was sponsored by the Museum of Flight. The Museum of Communications had a booth set up on all three days and we made contact with many new faces.

My Twin

By Herb Hackenburg

I met my twin in Control Room A, Radio Station WBGU, a 1500 watt station owned and operated by Bowling Green State University in Bowling Green, Ohio.

We were both Juniors and taking Radio Journalism Class 306. The class was simple. We were DJs who wrote and produced our own one-hour show, three times a week. Mostly that meant pulling records out of the station's music library and writing our script from the liner notes. My twin was my engineer, and I was his engineer.



My twin was named "Herb." My twin was born on October 14, 1934. I was born on October 14, 1934. My twin's full name is Herbert J. Moorehead; he was scholarship student on the track team and is black. My full name is Herbert J. Hackenburg and I was on the inter-mural, co-ed ping-pong team. I'm white.

As a commuter student I had a car. None of the campus students were allowed to have a car. I told my mom and dad I was bringing my twin home for dinner. The look on their faces when my twin and I walked in the door was very interesting. The effervescent Moorehead soon had everyone laughing. The dinner not only tasted good, it was fun.



A year later my twin and I graduated. My twin hooked up with Ohio Bell in Dayton; I hooked up with the Montgomery County Tuberculosis & Health Association in Dayton. We both joined the JC's.

My most important job was not in my job description. I was supposed to "hound" my fellow JC member from the phone company to let the TB Association have its old addendum. In 1957 the TB Association was financed by its Christmas Seal mail campaign. The more accurate and up-to-date your mailing list, the better your campaign. The phone company's addenda was a record, issued daily to the local information operators, of every new telephone customer's name and address.

While the phone company twin was telling me for the fifth time that any phone employee caught selling and/or giving an old addenda would be fired instantly, our wives were becoming good friends in the JC Wives organization. Later I was promoted to the state TB Association, then to the Executive Director of the Lorain County TB & Health Association where I had two phone companies to fight with. I solved my problem by joining Ohio Bell myself.

When I became a News Manager (official company spokesperson), I had direct access to the statewide addenda, a fact that I never told my old friends in the TB Association.

Herb Moorehead moved up in the AT&T Marketing organization. I ended up as the Corporate Historian for Mountain Bell. I sometimes wonder, "Do they even have printed addendum anymore?" And, 'I wonder where my twin is now?"

Your Child Will Speak

By Don Warsavage

A parental worry turned to fear. It was back in the sixties. Their little infant, Steven, at eighteen months was behaving strangely—had been for some time. They had to find out what was wrong. The doctors' exams and tests found the problem. Steven had a severe hearing loss in both ears. "How severe?" they asked. "Your little boy starts to hear when the sound volume reaches ninety decibels." That was roughly the level of sound produced by the siren on a fire truck.

They learned that children born totally deaf are already thirteen weeks behind in auditory brain development and thus oral communication is very unlikely. They also learned that the first three years of a child's life are the most critical in auditory brain development. The earlier the problem can be discovered, the better the chances of helping. Visiting with many experts and struggling against a pressure of time and many possible unhappy outcomes, a woman told them, "Your child will speak." To the parents, those words were a life line of hope. The woman who said that was Doreen Pollack, founder of The Listen Foundation in Denver.

And Steven did speak. With powerful hearing aids and years of work, Steven, now in his fifties, holds down two jobs. His parents are Dick and Marilyn Rolan. Dick was a telephone man at Mountain Bell and a good one. When he was president of The Frederick Reid Chapter of the Pioneers he visited many service clubs and hospitals urging early testing of babies for hearing loss.

A remarkable invention occurred in the mid-seventies. A device was invented that could measure infant brain waves and determine if hearing in the infant was impaired. Remarkably it could be done in only one day after the child's birth. The Infant Hearing Association Foundation (IHAF) was formed to try to apply the new technology.

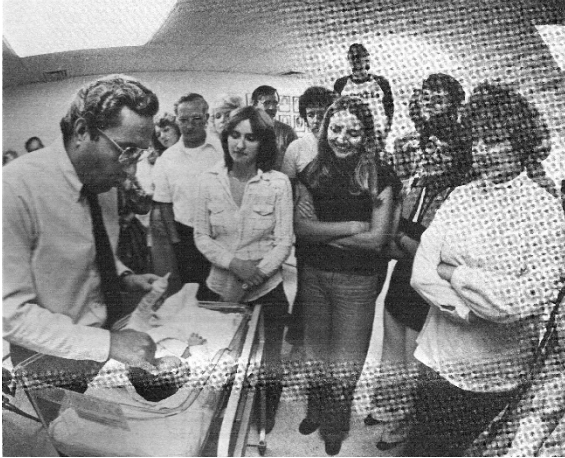
The process of actual testing required that electrodes had to be attached to the infant's skull and the baby had to wear earphones and had to be asleep! And many of the new machines would be needed. That would mean extra staff and extra funds.

The Pioneers stepped up, partnering with the Infant Hearing Association Foundation. They said they could provide volunteers for the extra staff. And the Telephone Pioneers of Western Electric in Indianapolis, Indiana could manufacture more machines at a relatively low cost.

The Infant Hearing Assessment Foundation chairman, Dan Patterson was featured on national television touting the program to detect hearing loss in infants.

Dick Rolan was asked to help get a program going in Denver. He got his boss to serve as Project Manager. University of Colorado Hospital agreed to host a trial and offered Dr. Beverly Koops, Pediatrician, to assist. The audiology department would provide the office facilities and their head of audiology would oversee the operations.

Ethel Iverson, wife of then president of the Frederick Reed Chapter of The Telephone Pioneers in Denver, agreed to be the chairperson of the Pioneer volunteers and the call went out. Over 40 Pioneers and/or their spouses volunteered for the program.



Things were rolling along well. The volunteers were being trained. The facilities were being set up and a graduation date and a program start date had been established. That's when the head of audiology reported: "This machine doesn't work."

"That's just crazy!" was the response. "It's been tested a million times."

"I don't care," she said, "This machine does not work. We are not going forward with a program featuring a machine that does not work."

The inventor, Dr. Phillip Peltzman of the University of California's Medical Center, was called and agreed to come to Denver. When he arrived he tested the device and reported, "She's right. It doesn't work." And to everyone's sigh of relief, he added, "But it's an easy fix." And he fixed it.

On October 2nd, 1979, Dr. Peltzman demonstrated the machine, dubbed SYNAP I, as reported in the MB Times. Then on October 16th the first graduation class of Infant Hearing Assessment Pioneer volunteers was honored. Fred Cook, Mountain Bell Vice President, Human Resources, conducted the "gowning ceremonies." In attendance were Dan Patterson, National Executive Director of the Infant Hearing Assessment Foundation; Mitch Woods, Telephone Pioneers; and Don Warsavage, Project Manager. About a hundred people were in attendance. Brief remarks were made by Ann Gorsuch, later to become director of the EPA.

After that, hundreds of at risk babies were tested successfully at Colorado University hospital. Many babies with hearing deficiencies were discovered in time for treatment to make a difference in their lives. After the program started at University of Colorado Hospital in Denver in 1979 (the fifth location), Infant Hearing Assessment, using SYNAP I spread to over 34 more hospitals from the West Coast to Nova Scotia, Canada in two years. Thousands of infants were tested utilizing the skills and resources of volunteers from The Telephone Pioneers of America.

The Telephone Pioneers have been more than amazing over the years. Because of them, a sightless child hears stories from Talking Books. A little boy who cannot see swings a baseball bat, striking a pitched "beeping baseball" that flies beeping away into the glove of another sight impaired youth. A traumatized little girl is gently handed a "hug-a-bear," by an EMT responding to her emergency. A young man with hearing deficiencies has language skills he would never have achieved without early detection. These are just a few of the benefits our country has received from the people of The Telephone Pioneers of America.

Dick Rolan has a plaque that reads: "THE PRESIDENT'S VOLUNTEER ACTION AWARD. Established to recognize, inspire and encourage exemplary volunteer achievements in communities throughout the United States." Dick's name is on it. It is signed by Dan Patterson, National Director of IHAP, and by Ronald Reagan, and has the President's Seal at the top. Dick retired in 1990 and lives with his wife, Marilyn in Pueblo, Colorado. They and their daughter, Beth, currently employed at CenturyLink, all contributed to this article.

TELEPHONE ALMANAC 1941

*Being (until March 10th) the 65th year of the Telephone
and (until July 4th) the 165th of American Independence*



- ☐ CONTAINING valuable information for Farmers, Business Men, Housewives, Students and other Telephone Users.
- ☐ AND ALSO a Chronicle of twelve Historical Events in the History of these United States which serve to illustrate the importance of Communications in shaping the Destiny of the Nation and in bringing its several Commonwealths together into a single, united National Community.
- ☐ AND MORE particularly, a Compendium of Fascinating information in regard to the Telephone, its Invention, its Development and its present Importance; Descriptive Matter as to the Bell Telephone System, the Men and Women who compose it, and the Buildings, Poles, Wires, Cables and divers other Mechanical Contrivances and Instruments which constitute its Material Equipment.
- ☐ TOGETHER WITH various and sundry Items relative to the Part which the Telephone has played in bringing America into closer Touch with the other Nations of the World.

American Telephone & Telegraph Company
195 Broadway New York

The Telephone Almanac included a monthly column of historical facts. Here is the column from January, 1941. (When nothing historic happened on a certain day, little tidbits about the telephone were mentioned.)

“Ye telephone will help thee send thy New Year Greetings to thy Friend!”

- 1 – First telephone exchange in Maryland opened at Baltimore, 1879
- 7 - Opening of commercial radio telephone service between New York and London, 1927
- 10 - When winter storms block street and highway, telephone calls are substitutes for travel.
- 14 - One-way transoceanic radio telephony from New York to London demonstrated by Bell System engineers, 1923
- 17 - “Northern Transcontinental Telephone Line, between Chicago and Seattle, opened, 1927
- 23 – Training in courtesy is an important part of education of every Bell System operator.
- 25 – First Transcontinental Telephone line, connecting New York and San Francisco, opened, 1915
- 28 – First commercial telephone exchange in the world opened at New Haven, Connecticut, 1878

We are so thankful for our volunteers, members and supporters. We hope you all have a beautiful fall season, a festive Halloween and a family- and friend-filled Thanksgiving!





THE TELECOMMUNICATIONS HISTORY GROUP, INC