



Dial-Log



Published quarterly by
The Telecommunications History Group, Inc.

DENVER, COLORADO

A Note From the Editor

First the bad news – Barb Gibson has accepted a full-time position, so will no longer serve as THG’s Executive Director. However, our very competent Executive Secretary, **Renee Lang**, will continue to keep things running smoothly. And, of course, the volunteers will continue their work to preserve and protect our telecom history. So we’re all pretty busy, but there will be no disruption of service while the Board searches for a new Director.

The good news is that **Lisa Hensley Eckert** has joined our Board. Lisa is the Director of Wholesale Public Policy with CenturyLink. As a reminder, our board members are all volunteers, too.

Speaking of volunteers, our numbers are dwindling. As for many non-profit organizations, the Telecommunications History Group's volunteers are its life's blood, keeping the group functioning, and the archives and museums in good order. Volunteers are essential to the building and maintenance of our collections, performing a variety of jobs, including archival and curator functions. Plus we have a really good time doing it! Please consider joining us in 2014. Here are some of the activities we perform:

- Conduct historical and academic research
- Help preserve historical documents, photographs, video materials, etc.
- Database entry and management
- Repair antique equipment
- Conduct tours of the 1929 telephone company headquarters building
- Present educational talks and exhibits at schools and other organizations
- Record and transcribe oral histories
- Develop museum and traveling exhibits

Thanks to all of you who have renewed your memberships, our fundraising has been very successful this year. If you haven’t sent your renewal, there’s still time – you don’t want to miss a single issue of *The Dial-Log*. Your memberships and the proceeds from our endowment fund enable us to continue our preservation and education efforts.

My Telephone Career by Hugh Ernest Johnson

The following reminiscence is from the THG Archives unpublished manuscripts. 2013 isn't the first rough winter we've had!

I began my telephone career in Hopkinsville, Kentucky in August 1906, working for the Cumberland Telephone Co.

I came out to Colorado for a vacation. . . Christmas Eve, 1907. On the train to Fort Collins, I met Frank (Cap) Carroll, who was District Manager of that city. He was originally from Mississippi (a neighbor of mine).

He let me sit by the window so I could see what the wind had done. It had blown a small engine and car off the track. Mr. Carroll asked me to come to the office . . . he wanted me to put up poles that the wind had blown down.

Later (*January 1908*) I transferred to the Colorado Telephone Co. from the Cumberland Co. I began working as a lineman inspector, and even did janitor work in the small office above the Avery Building in Fort Collins. For this janitor work I received \$10 a month in addition to my salary.



The office consisted of two rooms on the second story of the Avery building. These rooms contained switchboards, toll equipment, etc. There was one night operator, Alice (Johnson) Hayward, and several day operators. There were about 1,500 phones in the area, and one toll line to Cheyenne, Wyoming. Since there were few cars, we hired horses and a buggy from the livery stable. All the work was done by a combination man.

During Frontier Days in 1908, Mr. Carroll gave me his (*railroad*) pass to go to Cheyenne. He said Teddy Roosevelt would be there with his horse. When I came back, I missed the train and had to spend the night in Greeley (*Colorado*).

Mr. McAfee, the auditor, wanted to go home for the weekend and asked for the pass. Mr. Carroll told him that I was using it. So he reported the incident to the president who threatened to fire all of us.

Later on, when the Colorado Telephone Co. united with Montana, Wyoming, Idaho, Utah, New Mexico and Arizona,* it became known as Mountain States Telephone & Telegraph Co. To celebrate this occasion, a special train with all the officials on board stopped at Fort Collins. Ned Fields (*Edwin B. Fields, Jr.*), the Vice President, asked me if we could have a fish fry. Game Warden Fred Stirling and I seined the river and got enough fish to feed the group. After the fish fry at the Northern Hotel, I received a letter from Mr. Fields (*Edwin B. Fields, Sr.*), saying, "I was going to fire you at one time, but now you have redeemed yourself." Signed, the President.

We moved into a new building in 1911. O. F. Tischner was wire chief. When he went to Pueblo, Delbert Hawley took his place. When Delbert quit in 1912, I was made wire chief by E. P. Letterman. I held this job until 1916.

On Christmas Eve, 1913, I rented a car to patrol the line to Cheyenne to locate toll trouble. It was 35° below zero. When the battery-operated car froze up just as I arrived at the state line, I called Mr. Forbes, the district wire chief in Cheyenne. He contacted Senator Warren (*Francis Emroy Warren*), who gave me permission to flag the train. This I did, and rode into Cheyenne. The next morning we obtained batteries, drove to the state line, started my rented car, and I drove home to Fort Collins.

In the winter of 1913, there was a terrible snow storm with drifts of six feet high and more. The girls stayed in the office for several nights, having their meals brought to them.



In 1913, we took an inventory of the lines, poles, insulators, etc. in Larimer County; C. J. Rock had charge. George Armstrong from Boulder County was our boss, and Mr. Rike had Weld County.

On July 29, 1914, I had men stationed every few miles to check on the calls when Mr. Bell talked from New York to San Francisco. This was the first Trans-Continental call ever made from coast-to-coast.

From 1916 to 1920, I held the job of section patrolman in Larimer and Boulder Counties. In September 1920, I transferred to the Denver Plant as foreman (tree trimming). I had one and sometimes two crews of men working to trim trees all over the state of Colorado. I was listed as supervisor and received no “overtime.” Usually, I hired my own men. We often used men in the Davey Tree Trimming crew. This job I held until my retirement in November 1945 – about 40 years.

I have enjoyed nearly 29 years since being retired, and have been truly grateful for my pension and the many friends I acquired, many of whom have since passed away. In 1971, my son Gilbert retired from the Pacific Telephone Company He had 43 years service. I was able to attend his retirement party in San Diego, California. No one could remember another father who had lived and was able to attend his son’s retirement party!

** The Colorado Telephone Company, Tri-States Telephone Company and Rocky Mountain Bell Telephone Company merged to become the Mountain States Telephone and Telegraph Company in 1911.*

Ancient Phone

There's a 1,200 year old phone in the National Museum of the American Indian storage facility in Suitland, Maryland. It is the earliest known example of telephone technology in the Western Hemisphere.



According to author Neil Baldwin,

The marvel of acoustic engineering—cunningly constructed of two resin-coated gourd receivers, each three-and-one-half inches long; stretched-hide membranes stitched around the bases of the receivers; and cotton-twine cord extending 75 feet when pulled taut—arose out of the Chimu empire at its height. The dazzlingly innovative culture was centered in the Río Moche Valley in northern Peru, wedged between the Pacific Ocean and the western Andes. “The Chimu were a skillful, inventive people,” Matos tells me as we don sterile gloves and peer into the hollowed interiors of the gourds. The Chimu, Matos explains, were the first true engineering society in the New World, known as much for their artisanry and metalwork as for the hydraulic canal-irrigation system they introduced, transforming desert into agricultural lands.

Read more about it at: <http://www.smithsonianmag.com/ideas-innovations/Theres-a-1200-year-old-Phone-in-the-Smithsonian-Collections-231152081.html#ixzz2nCRVUw1G>

Me and My PBXs (part 2) by John Swartley

Last issue, we left John working on a TE-400 PBX, in Steamboat Springs, CO during the winter of 1970. Here's "the rest of the story."

The Company agreed to pay for all my moving expenses if I would transfer to Steamboat, then a very booming ski area. In the fall of 1971 I packed up the family and headed to Steamboat. For the next ten years I was the western slope PBX installer. I installed large PBXs from Winter Park Ski area to the large coal fired power plant west of Craig, Colorado. I installed small 761s in motels as far west as Rangley, and south to Meeker. All the hard work installing was rewarded on the so called "cut date;" this was the day we connected all the extensions and trunks to the new PBX and let the customer start using it. Most of the cuts on the Western Slope were during the off season and did not cause as much interruption of service as had cutting the large office complexes in Boulder.



On the larger PBXs they would send the new customer operator to Denver for training. The Mountain Bell training staff would be on site for the day of the cut and help the new operators. We would have small cut parties afterward. For some reason, PBX operators were the lowest paid positions in the companies. It was not long until the operator was transferred to another higher paying position in the company and I would have to try to train a new operator; they were only allowed one staff training session. One of the best operators I ever worked with was at the large Energy Mine south of Steamboat. She knew where everyone was and was very efficient. On one of my service calls to the mine there was a new operator struggling to answer the switchboard. A day or so later I saw the original operator operating a drilling tool in the mine. She told me she was making \$18.50 per hour watching the drill go around and around and only made \$6.00 as PBX operator; she was bored stiff but needed the money.

In Craig, I was installing my first 761A in a motel room with a TV set. I thought it would be great to have the TV on and work at the same time. After installing the wrong trunk unit in twice, I realized working and watching TV did not work. I also spent several hours trying to make extension-to-extension calls work. I gave up and called Denver and they informed me the 761A hotel/motel PBX were not designed to make room-to-room calls.

I installed a 756 PBX at the Exxon Mobil shale project that was going to solve all the nation's oil supply problems. The complex was located 60 miles west of Meeker and I spent 2 hours a day of driving time, dodging deer both directions. Exxon was to supply the trunks via their own microwave system. The engineers sent a protective interface unit to install between their microwave and our PBX. The problem was that the interface was designed to protect our incoming trunk lines from the vender's equipment, not the other way around in the case of this installation. After hours on the phone with the engineers, I tossed the interface in the corner and went home. I installed a demark for the extensions and Exxon maintained all the extensions on the site. I never returned to

the site, it either never had any trouble or they dispatched a technician from another area.

In Steamboat, with the help of ever-rotating PBX installers from Boulder, I installed 770s, NA 409s, TE-400s and 761As. Other than the TE 400, I didn't install the electronic Dimensions, Horizons and the little Mitel hotel/motel PBXs until I transferred to Montrose.

We had a TE-400A scheduled to be installed in a new motel in Steamboat. The room engineers noticed that the PBX room was not tiled and requested the customer to do so. After they installed tile, the contractor placed a propane heater to dry the glue faster. In the middle of the night the propane tank exploded, knocking out all four walls of the restaurant; the roof was resting on the ground. They opened their first season with a key system in a room/front desk. Since it happen at night, no one was injured.

Engineers installed a used 770 PBX in one of the hotels. It was not equipped with the message-waiting feature most hotel/motel units had. They issued another estimate and sent me a big bag of diodes and resistors. I was to install two resistors and one diode to each station line relay; it was a 400 line PBX. The customer did not plan on using the message-waiting feature, so converting the relays was usually the last item in my job jar. I never finished the project, but when work was slow I could go work on the estimate to cover my time and that made my boss happy. This PBX was changed out for some reason and I was assigned to get it ready for the Denver moving company to pick up. I started unbuckling each cable and trying to save it. My supervisor brought me a large cable cutter and told me to get after the program. It was one of the hardest things I ever did PBX-wise, and soon I was repeating the process as all the old relay PBXs were replaced by electronic ones. They were sent to the recycling centers; like so many things in the Bell System, it was the end of an era.

One of the motels had a 761A PBX. The switch was located in a small room attached to the back. On real cold mornings it would not operate properly. I called the engineers and they informed me the cold would not affect the switch. I had the customer install a heater in the room anyway and it solved the problem. The engineers would never admit the switch could freeze up; they just never realized how cold it could get in the ski country.

After I transferred to Montrose, we started installing the big Dimensions and smaller Horizons. The company started buying a small hotel/motel switch from Mitel; it worked great except it took a long time to program. The first series of the Mitels had a weak power plant and I spent a lot of time reprogramming the switch; they had no backup system.

The Dimension PBX had a backup tape in case of a major failure. On every service visit to the PBX we would swap tapes so they were current. One day at the big Western Power Administration in Montrose, I swapped out the tape and was going to inform the operator I was leaving when I noticed all the red lights were flashing on her console!!! I had accidentally installed the test tape. Good thing it was the Federal Government; they usually didn't get too excited when the phone system went down. We installed a Dimension in the Montrose hospital. They had a huge diesel generator for backup power in case of power failure. They started it once a week for testing. On the tests everything worked great; on an actual power failure there was enough power interruption to bring down the Dimension. It would take several minutes to run the backup tape to reboot - a telephone interruption in a hospital is a major problem. My boss was not too concerned because they would not pay for a backup battery system that would have solved the problem.

After AT&T laid us all off I started taking care of the Telluride Ski Company with my newly formed company, Swartley Enterprises. They purchased a new switch made by Siemens Company. The Siemens Company asked me to maintain it so they would not have to send a man over from Denver. I told them I would for \$35.00 an hour. They replied they couldn't pay a technician that kind of wages. I said ok, because I was already getting more work than I could handle. A few days later Siemens called back and said they would pay that wage as long as I did not tell any of their other technicians what I was getting paid. It did not take long for them to figure out it was cheaper to pay me than to send a technician from Denver to Telluride. They allowed me to attend their school for free, but I had to pay my own expenses getting to Denver. It was very similar to a Dimension and they had a good support group I could call.

During my PBX career the company sent me to all the schools I needed and I always knew that if I could not fix it there was someone in the company who could. In later years, I was one of the techs they sent to help solve problems. As I impressed the younger technicians with my ability to solve some problem, I would think back; it was not too long ago I was the young tech being impressed. I often remembered one of my first telephone installs back in Kansas; it was the new princess telephone, it had five leads to connect and I had to call for help. Of course that was 102 years ago.

My thanks to the Seattle Museum of Communications for the PBX photos I copied. I had the good fortune of visiting the Seattle Museum a couple years back and it should be on the "bucket list" of every person interested in telephone history.

What Happened...

100 years ago, 1913 – In the "Kingsbury Commitment," AT&T promised to dispose of its telegraph stock, and to provide long distance connection to Bell System lines to independent telephone companies.

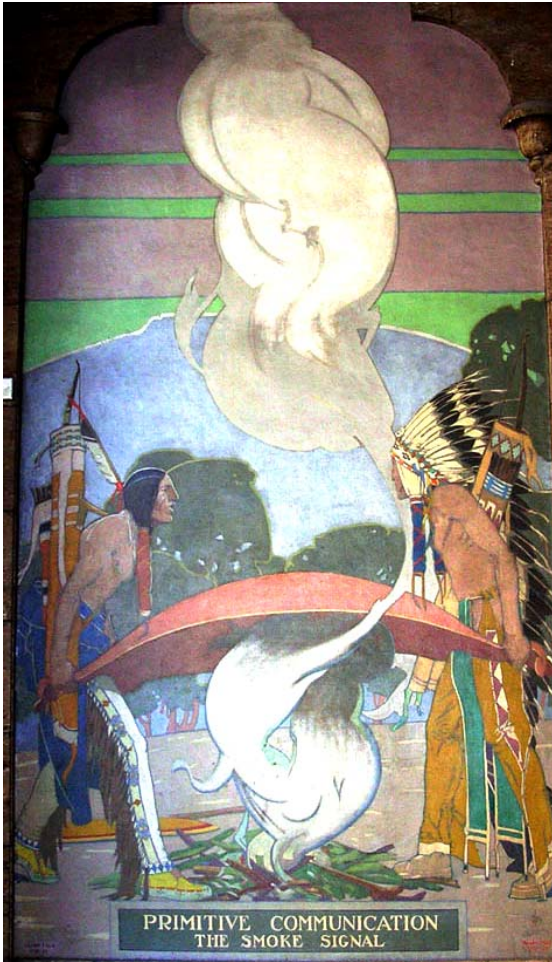
In the fall, MST&T crews started surveying the route from Denver to Salt Lake City. At the same time, Pacific Telephone Company crews started working their way east from San Francisco.

75 years ago, 1938 – A radio program of H.G Wells' *War of the Worlds* caused telephone traffic peaks in nearly all U S cities and on long distance lines. Some calls were even placed to New Jersey where the invasion was supposed to have taken place – listeners apparently missed the repeated statement that this was a purely imaginative rendering from a novel.

50 years ago, 1963 – US telephones totaled 80,969,000; the world's total was 159,200,000.

Relay, the first commercial communications satellite (developed for NASA by RCA), beamed its first full-scale TV program simultaneously to Europe and the US.

25 years ago, 1988 – Controversy heated up over "dial-up" 900 services. Telephone pornography and sex services had become a \$2.4 billion a year business, but public pressure caused a storm of bans and controls, while allowing the companies to continue.



New Exhibit at 930 15th Street

If you're planning to come to downtown Denver during the holidays, please stop by the corner of 15th and Curtis. (If you're not, now's the time to change your plans!) We have a new exhibit in the windows of the CenturyLink building there.

The exhibit tells a brief history of the telephone from 1879 when the first phone appeared in Denver, through the present with its varied and ubiquitous communications devices.

We will be adding to and changing the exhibit during the next few months, so plan to visit often!

While you're here, you might want to drop in and visit us at the archives. We're always happy to see our members.

Remember that we offer tours of the Mountain States Telephone & Telegraph Headquarters building at 931 14th Street. A tour is a great way to entertain children on school breaks and visiting family members.

We need your stories

We hope you've enjoyed reading the personal stories from Hugh Johnson and John Swartley in this issue. History is more than dry facts and dates. What really makes it come alive is the stories of the people who lived it.

If you'd like to share stories about your career with the telecom industry (or that of family members), we'd love to have them for our archives and for the newsletter. You can e-mail them to us at telcomhist@aol.com, or snail mail them to:

The Telecommunications History Group
P.O. Box 8719
Denver, CO 80201-8719

Include photographs if you have them and, whenever possible, identify the location, names and dates associated with the photos.

Finally, a note from **Mike Nearing's** collection of letters to installers:

To: Ma Bell's Wire Wielding Wonderman

From: Judy & Marla

This memo is designed to help you ring our chimes right the first time around.

Yes, we do want two ding-a-lings, each with its own personal number. To avoid confusion +/or arguments between the phones, we wish them to reside in separate rooms - preferably in the room of the person picking up the tab for its stay here. We have done our best to make them feel welcome here by putting welcome signs on our bedroom doors - introducing ourselves and designating their resting spots. We promise to raise our new phones in an atmosphere of trust + goodwill.

Yours,

Judy & Marla

P.S. Freely translated instructions for whose phone goes where + to what extent are posted on the bedroom doors. Have a good day - just keep telling yourself "I love my job!"



Have a wonderful Holiday!



THE TELECOMMUNICATIONS HISTORY GROUP, INC.