



TELECOMMUNICATIONS
HISTORY GROUP

CONNECTIONS *news*

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Dave Felice, editor

A message from our director

Unless you live around eastern Lake Superior, you'll be among the first to read about a brave operator who apparently took her oath of communications confidentiality extremely seriously. The operator on radiotelephone duty the night the Edmund Fitzgerald went down took the details of her experience to her grave. Her family and a close friend now say she may have been the last person to communicate with the big ship.

In this edition, you meet some of the people making the Telecommunications History Group museum expansions possible. Nothing would happen without the strong involvement of these dedicated volunteers.

In Seattle, the team is already hard at work packing and moving the JKL collection from Santa Cruz. In Denver, volunteers are getting ready to move the McCarter collection to our new museum space in the Spring. It is going to be a busy 2026 for everyone at THG.

This is your newsletter, and your telephone story is important. If you'd like to share a story with other readers, let us know! Send your story to telcomhist@aol.com, with "Editor" as the first word in the subject field. Whatever you submit does not have to be composed; a collection of words and thoughts is what's important. We can even use scanned handwritten material, if it's legible. And remember to send pictures. Other readers would like to see stories and pictures that are significant to you.

Thank you for your continuing interest, support and involvement.

Renee Lang
Managing Director

A place called Telephone



Along the Red River forming the Oklahoma border, about 70 miles north of Dallas, lies the community of Telephone, Texas.

The census-designated settlement got its name because Pete Hindman had the only telephone in the area, at his general store. Postal officials rejected Hindman's initial name suggestions because they were already used. He finally submitted the name Telephone, and the post office opened in 1886.

By the 1940s, Telephone had ten businesses and 280 residents. Latest census figures for ZIP Code 75488 in Fannin County put the population at 210, stable for several decades. Telephone has the original 903 Area Code and the overlay 430. Southwestern Bell and Verizon are the prominent carriers, with service also provided by Sprint, Level 3, and independent companies.

President Thomas Jefferson designated the Red River of the South as the boundary between Louisiana and New Spain/Mexico. The river later became the border for the Republic of Texas and the Oklahoma Territory. Lawyers determined Oklahoma had jurisdiction over both banks.

The county is named for James Fannin, commander of defeated Texans at the Battle of Goliad in the revolution against Mexico. The county is in the Texoma region bordering a large river lake. In early days, a ferry linked Telephone with Oklahoma. In 1926, Austin Bridge Co. built a one-span, 400-foot bridge.

The Telephone Travel Stop has a small store, snacks, lodging, RV parking, and storage units.



Persians pioneer communications

In a brand new book, famed Irish historian Josephine Quinn links organized long distance communication to the ancient Assyrian empire from the Persian Gulf to northeast Egypt.

Quinn's newest work is called How the World Made the West: A 4,000 Year History. By the middle of the eighth century BCE (Before Common Era), she explains, the Assyrians consolidated



their lands with a road network. "Empires don't need to hold territory in constant occupation if they control the routes through it," she writes.

The roads made up a postal system with standard daily routes. Quinn says the Assyrians first harnessed hardy and sure-footed mules for the imperial communications. In mule relays, she says "the state could move messages as fast as any system before the Ottomans introduced the telegraph in 1865".

Quinn says the U.S. Postal Service motto is based on the Persian network. Greek historian Herodotus wrote: "Neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds."

Challenging previous notions, Quinn says history is more than studying Greece and Rome.

Volunteers enthusiastic about THG growth

Two of the Telecommunications History Group's most recent volunteers are thrilled to be part of expanding the preservation and display of telecom history. Michi Lumin and Tim Sessana bring extensive experience in communications and computer technology to setting up an entirely new museum in Denver and a second location in Seattle.

THG is acquiring the artifacts of John K. LaRue's American Museum of Telephony collection in Santa Cruz, California. Veteran telephone engineer Phil McCarter of Oregon is also providing his collection to THG. These valuable communications artifacts will be divided for display at THG sites, expected to open later this year.

"With so much reliance on lightening-fast movement of bits and bytes, it's more important to educate others on the electrical wonders of days gone by," says Sessana. "I am ecstatic we can have real, working switching equipment for people to touch and experience."

Both volunteers express passion about being involved in preserving older equipment for prosperity. "This is part of our history not taught in schools. I'm proud to contribute my time and effort to bring the heritage to as many people as possible," says Sessana. "I'm incredibly grateful to THG for the opportunity to be part of this significant project."



Born in Buffalo, Sessana made his way to Centennial, Colorado about a decade ago. He says he was interested in electronics and communications as a youngster and "got in trouble for playing with the phone." He says his interest in "the far sound" of telephony goes in hand with his fondness for broadcast radio and a "never-ending desire to know how things work."

Lumin explains that she helped "initialize" the Denver museum idea after working on THG projects in Denver and Seattle. "I became enraptured," she comments, "I just couldn't get enough of being a part of the expansion."

Michi adds: "For years, I actually felt sad to see a system decommissioned. I kept asking myself why we couldn't keep some of the older devices. Now, it's great that we can not only keep the equipment but have it operational."



Michi Lumin says she started as a "young phone phreaker and BBS (online bulletin board) operator, into the 80s hacking scene." She admits to using blue and red box dialing devices to access the phone network. "My BBS is still running on dial-up, 40 years later." She actually owns a decommissioned AT&T Long Lines tower "out on the Colorado plains."

Lumin has worked as a Central Office and field technician for AT&T, Bell Atlantic, Sprint, Qwest/CenturyLink, ViaWest, and Sony/Sonic Foundry. She was directly involved in finding a Denver-area museum site and continues to work with Phil McCarter on relocating his collection. She suggests that, in the not too distant future, it may be possible to link the Denver and Seattle museums in a way as close to original Bell System methods as possible.

"I want people to explore the amazing ingenuity and complexity of the Bell System. Modern networks and processes are only there because we're standing on the shoulders of giants. I want to preserve the massive machinery and product of thousands of minds that enabled us to be where we are today, not with just a description but with the actual experience."

Operator obituary poses major shipwreck questions

Superior it's said never gives up her dead
When the gales of November come early
— Gordon Lightfoot

A new report of a telephone operator's connection with the wreck of the *Edmund Fitzgerald* adds mystery to the ship's sinking in Lake Superior 50 years ago. The obituary of Barbara Kubont suggests she was the last person to communicate with the *Fitzgerald*. The huge ship went down on November 10, 1975, in one of the lake's fiercest storms. The entire crew of 29 perished.

Michigan Bell operator Barbara Kubont, 73, died in Wisconsin in May 2025. The Canadian newspaper group Village Media printed her obituary which reads:



On Nov. 10, 1975, Barb received the distress call from the *Edmund Fitzgerald* before contact was lost; her next call came from the *Arthur M. Anderson* relaying the *Fitzgerald's* final distress message. Barb remained on the line with the *Arthur M. Anderson* for hours, well past the end of her shift.

The *Anderson* was 10 miles behind *Fitzgerald* when the iron ore transporter sent the last officially known message, "We are holding our own." Kubont's mortuary notice, not widely circulated, does not give details of her last communication, but does state "(the) call deeply impacted her for the rest of her life."

The obituary says Kubont handled Ship-to-Shore calls. She was on duty in Sault Ste. Marie at the time of the shipwreck in 1975. She retired from Michigan Bell (AT&T) in 2003.



Kubont's cousin, Kelly Ninmer, wrote the obituary. He got the information from Kubont's lifelong friend and co-worker, Barbara Haskie. According to Village Media, Haskie remarked "I do remember Barb saying she talked to the *Fitzgerald* and the *Anderson*. She didn't want to talk about it. It bothered her." Haskie said operators were legally bound to maintain confidentiality.

Chris Gillcrist, director emeritus of the National Great Lakes Museum in Toledo, says the obituary provokes many questions. "I never heard or saw any evidence that said the *Fitzgerald* put out a distress call in what we would call the traditional 'Mayday'," he told Village Media. "This is the first time I'm seeing this kind of claim. From a historical perspective, you have to be skeptical."

Gillcrist says distress calls are broadcast on an open channel so anyone can hear. The exact cause of the sinking has never officially been determined. So far, news of Kubont's obituary has been limited to the area of eastern Lake Superior. Given the attraction of the *Fitzgerald*, researchers are likely to be seriously scrutinizing the phone operator's story as time goes on.

Original THG story by Dave Felice, award-winning member of National Writers Union

The legend lives on

The shocking and tragic wreck of the *SS Edmund Fitzgerald* in Lake Superior in 1975 dramatizes how an event becomes historic. Maritime lore, a popular song, and treacherous conditions on the Great Lakes help make the *Fitzgerald* legendary.

Like many businesses, telephony prospered from plentiful natural resources carried by big ships known as "lakers." Tall strong pines of the north woods made the poles, iron and steel built the infrastructure, and copper from northern Michigan made the wires.

Raw materials and the extremely low cost of shipping created an unrivaled industrial economy in the northern Midwest. In a just-published book The Gales of November, John U. Bacon says

economic dominance depended on shipping across the lakes to factories in Detroit, Cleveland, and Chicago, where Western Electric's Hawthorne Works benefitted from proximity to lake transport.

On November 10, 1975, a massive storm hit the *Edmund Fitzgerald* making its way eastward across Lake Superior. The largest and most successful laker of its time sank in 100 MPH winds and 50-foot waves. All 29 crewmen were killed. Bacon says the shipwreck was "a wake up call." Communication and safety practices were improved, and no other ship has been lost since 1975.



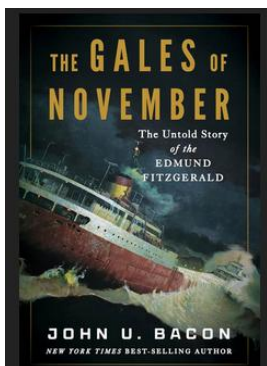
Publication of Bacon's book coincides with the 50th Anniversary of the sinking of the *Fitzgerald*, the acknowledged finest ship of its kind at the time. Bacon says everything about the 729-foot long ore carrier was "first class." Singer Gordon Lightfoot describes the boat as "the pride of the American side."

"Few Americans understand how great the Great Lakes really are," Bacon writes. "You have to see them to believe them." Superior – the big lake the Ojibwe-Chippewa call

Gitchi Gumee – is 350 miles from end-to-end and as big as Ireland. Unlike rolling saltwater waves, the fresh water in the Great Lakes goes almost straight up and down. In cold weather, water freezes in mid-air and ice builds up on ship surfaces. Below-deck tunnels along the sides of the double-hulled Fitz enabled crew to move back and forth in bad conditions.

Communication consisted of marine radio and radiotelephones. "There were no cellphones," says Bacon. There is now an unconfirmed report that a Michigan Bell operator was the last person to communicate with the boat.

Bacon spent four years writing the book to tell "heart breaking stories...about who these guys were." He describes crew members as "unsung heroes who are the heart of the story." The mother of one crewman convinced the Canadian government to designate the sinking location as an official grave site with restricted access.





At Mariner's Church in Detroit, the crew is honored with the anniversary ringing of a ship's bell 29 times. In recent years, a 30th ring recognizes Gordon Lightfoot and his famous recording. Bacon says "without the song, there is no book." Lightfoot became close to the families.



Bacon says the shipping communities are close-knit, and traditions run deep. The Silver Bay Lounge hasn't changed much in 50 years and "about the only difference... is the payphone where the sailors lined up to call home has been removed." Many young men would go to work for the mines or the shipping companies directly out of high school, without thinking of college. Hasty phone calls created an ad hoc network, linking relatives around the lakes when the ship was lost.



The *Fitzgerald* reportedly never issued a distress call before sinking just over the Canadian side. The last known communication is radio from Captain Ernest McSorley to the nearest boat, *SS Arthur Anderson*. "We are holding our own," said McSorley.

The ship's 200-pound bell was recovered in 1995 and is displayed at the Great Lakes Shipwreck Museum in Whitefish Point, Michigan. The ship, broken in half, still lies at the bottom of Lake Superior. The cause of the sinking has never officially been determined.

The "Wreck of the Edmund Fitzgerald" in sound

Famous Canadian folk-rock singer/songwriter/sailor Gordon Lightfoot calls the recording of his song "The Wreck of the Edmund Fitzgerald" his greatest work.

Lightfoot recorded the song in Toronto in 1976. By most accounts, the session was the first time Lightfoot's full group had played the song. The group chose the first "take" for the disk. Unlike songs written long after an event, Lightfoot quickly composed accurate lyrics. Celtic-style instrumentation gives the ballad a mysterious sense. Reviewers consistently call it an iconic song.

Lightfoot re-recorded the seven-verse tune for a 1988 compilation, with minor lyric changes to improve accuracy. "(G)ood ship and true" became "good ship and crew." The line "a main hatchway caved in" changed to "*it grew dark, it was then*" And a musty old hall became a *rustic* old hall in Detroit. What's called "the shipwreck song" was #1 in Canada, #2 in the United States.



Original THG stories written by Dave Felice

New movie profiles famous phone phreak

A feature-length documentary of the life and exploits of famed telephone hacker Joe Engressia had its debut at this year's Sundance Film Festival. "The film is awesome," says Phil Lapsley, author of Exploding the Phone, the definitive book on phone hacking. "It is historically accurate and a moving message of love, hope, and inspiration."



Director Rachel Morrison spent over a decade researching the man who could manipulate telephone switches with perfect pitch whistling. "The film reflects my long-term dedication to understanding a person and their place in history. I have a specific interest in making movies about underground movements, subcultures, underrepresented communities, and shadow economies." She says reception has been great, including a good mention in *New York Times*.

As reported earlier in *Connections News*, Engressia changed his name to Joybubbles to reflect his philosophy of childlike joy and curiosity. Born blind in 1949, Joybubbles taught himself to dial a telephone by using the switchhook like a telegraph key. Later he learned to exploit vulnerabilities in the analog phone switches by whistling long distance connecting tones. He gained fame as a leader of a loose group of like-minded individuals known as phone phreaks. In one well-known demonstration, he called around the world on one phone and answered with a phone in his other hand.

In the 90s, Joybubbles rejected conventional adult norms and began to recover from childhood trauma by living a playful yet deeply intentional worldview. His chosen lifestyle became a symbol of creativity, vulnerability, and wonder. He died in 2007.

Morrison says she determined to bring the story of Joybubbles to life through the film: "I spent years trying to track down every person who knew him, former phone phreaks, friends, family, people who called into his telephone funlines, and friends he met through organizations of, and for, blind people. Using my archival skills, I dug up any artifacts he might have left behind – photographs, audio recordings, old phones, and answering machines. Joybubbles was beloved by those who remember him as someone incredibly talented, with a curious spirit, and a special warmth."

"Joybubbles" is the first film ever at Sundance with open Audio Description (AD). A human narrator describes the visuals, timed to on-screen action, in a globally-accepted format for blind and low vision audiences. Sundance provided Audio Description headsets, and another device for captions or amplified audio. Morrison says Joybubbles used the word blind to describe himself, and preferred the term over euphemisms such as visually impaired.

In a festival interview for *Variety* magazine, film editor Patrick Lawrence said the creators had to balance the personal and technological parts of the movie. "Joybubbles' involvement with phone hacking inspired people like Steve Wozniak and Steve Jobs to build their own blue box (signaling device), and ultimately, to create Apple computers," said Lawrence.



Commercial shows historic electronics

Discover credit card reaches into its history for a television commercial, with images of corded telephones and original IBM personal computers.

The advertisement, based on the Netflix science fiction horror series, "Stranger Things", promotes Discover's key feature of a reward for using the card. The video shows a customer service agent talking on the vintage phone while sitting in front of a classic computer. The agent holds a K-type handset and coiled cord from the 1970s. The actual phone set isn't shown. The computer is an IBM Model 5150, introduced in 1981.



Sears, Roebuck and Co. introduced Discover credit card in 1985, offering higher credit limits with no annual fee. Cardholders could earn a "Cashback Bonus" percentage of the spending refunded to the account. The card also did not charge a processing fee.

Sears – once known as the world's largest store – is almost out of business, with only a few remaining stores. Ownership of the credit card has passed to the Capital One group.

Sears fosters phone growth



Sears, Roebuck and Co. opened a new multi-level store on State St. in downtown Chicago in 1932

From its formative years, Sears, Roebuck played a significant role in telephone technology. The company started selling telephones in stores and through its catalog as early as 1897. Various companies made Sears telephones, which were re-branded for retail. Models included the well-known "coffin" style phone, a wooden box containing all the components. The coffin phones were originally built in the electrical machine shop of Charles Williams Jr. of Boston.

In the early 1900s, Sears had its own corporate telephone operations at the company's 40-acre campus in Chicago's North Lawndale area. The firm used an Automatic Telephone step-by-step switching center for internal calling. A large private manual switchboard provided long distance connections through Chicago Telephone Co. to locations from New York to St. Louis. There were 20 trunks and four operators.



Several well-known Sears, Roebuck and Co. products live on as independent companies or subsidiaries of other corporations. These brands include Coldspot-Kenmore appliances, Allstate insurance, Craftsman tools, and Silvertone electronics and musical instruments, such as the popular Silvertone guitar.

Sears lives on in communications history

As the retail operations of Sears, Roebuck and Co. decline, the company's communications legacy is in its second century. Sears started Chicago radio station WLS in 1924, sharing its frequency with WENR and a homemade 500W transmitter. The stations soon got a custom 5kW Western Electric transmitter made at Hawthorne Works. As stations proliferated in Chicago, WLS shared time with WCBD, then WENR and WBCN in 1930. In '31 WLS and WENR were licensed for a 50kW station and installed a new RCA transmitter.

In broadcasting history, what's on the air usually gets more attention than operations. Consulting engineer Barry Mishkind provides a re-constructed time line of WLS:



April 1924	Sears station started as WBBX, 670kHz, 500W, transmitter in Crete, Illinois; first licensed April 12 (some reports of broadcasts on March 21); call letters changed to WES ("World's Economy Store"), then WLS ("World's Largest Store"); frequency moved to 870kHz
Nov. 1, 1925	Power increased with 5 kW Western Electric 104-A-V.T. transmitter
June 1, 1927	Time share with WCBD
Nov. 11, 1928	Time share with WENR and WBCN
June 1930	Broadcast license half time on 870kHz, purchased time on WJJD at 1130 kHz for 2.5 hours daily
March 1931	Power increased to 50kW, shared time with WENR and WBCN, using WENR's transmitter in Downer's Grove
July 1933	Share time with WENR only
Mid 1938	New RCA R.T. 150-B-1 50kW transmitter in new building
March 1941	Moved to 890kHz, shared with WENR
April 1954	Shared time ends, WENR merged, new company installed RCA transmitter with Continental 315 backup 5kW
1959 to 2021	GE 4BT50-A 50kW transmitter replaced RCA; two Harris MW-50 (50kW) transmitters installed in 1977; replaced by Continental 317 (1989), and Harris DX-50 (1997); Nautel NX-50 replaced Continental in 2021

American Broadcasting Co. purchased both stations as WLS, in 1954. The RCA transmitter was originally designed by H. Chireix in 1935, built by McClatchy Broadcasting, which then sold the patent to RCA. The transmitter started as a Doherty-type linear modulation amplifier from Bell Labs, but engineers modified the amplifier to avoid paying royalties to Western Electric.

When a federal court ruling broke up Western Electric's broadcast interests in 1953, Continental Electronics got the AM transmitter business, including patents for the Doherty amplifier. In 1989, WLS returned to the Western Electric legacy, installing a 317-C3 50kW transmitter from Continental.

WLS observed its 100th anniversary in April 2024. After transitioning from agricultural interests, the station became a leader in "Top 40" Radio during the 1960s and 70s. The current broadcasts are news and talk at 890kHz.

Original THG story by Dave Felice, with Barry Mishkind. Anyone interested is cordially invited to subscribe to Mishkind's weekly Broadcaster's Desktop Resource newsletter

<https://lists.radiolists.net/mailman/listinfo/bdr>

McCarter collection getting new life

A look back gives a preview of what visitors will encounter at THG's new Connections Museum Colorado in the Denver area. Phil McCarter is a longtime telephone and switch collector in Northern Oregon. He is transferring the majority of his vast collection to the museum THG has under development in Arvada. This article by McCarter originally appeared in the April 2013 edition of *Switcher's Quarterly*, a publication of Telephone Collectors International. Revised for the current time and edited for space, the article is used with permission.

Phil McCarter: My Story



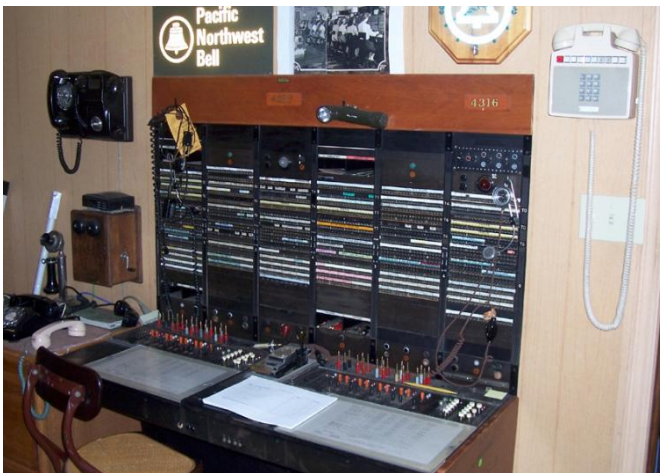
I have collected phones, key systems and several switching systems, to create a mini Bell System type network. The plan grew to include toll carrier equipment, switchboards and a pole line with two ten-pin cross arms. I have amassed a large collection of Western Electric step-by-step and crossbar, Stromberg-Carlson XY,

Automatic Electric, Itec, North Electric CX-100 and other types of switching equipment.



An Asterisk System places up to 48 random calls, to make the switches sound like a working office. The WE SxS has 60 working internal links and about 40 incoming or outgoing trunks. The Crossbar can handle 30+ calls. The CX-100 has seven local links and six incoming links. The XY can handle 25+ calls. (The intention) was to place calls to the 3CL Toll Switchboard and then back to the switching systems

or Asterisk (open source electronic switching).



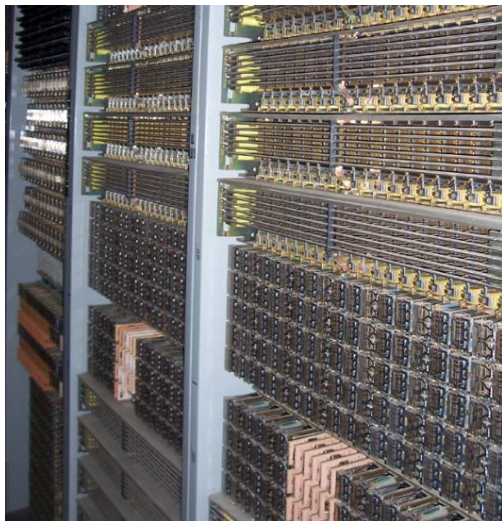
The toll switchboard can place calls by DC Key pulse or Multi-Frequency signaling, through two positions for 16 cord circuits. I have a five circuit magneto to 3CL trunk as well. This connects the 1800 Switchboard to the toll board. This switchboard has DC/Keypulse keypads, with one DC to Dial Pulse Sender and ten trunks to access the SxS systems. The 3CL has approximately 40 trunks connected to toll stations, incoming, outgoing and Asterisk TDM trunks.

All of the systems are interconnected for Extended Area Service. Each system has its own Automatic Number Identifier that is connected to the Asterisk Class 4 electronic switching system. When calling another C*Net user, they receive the number of the originating call.



The systems weigh over 70,000 pounds, not including cable. The system is designed to complete 1+ and operator CAMA trunk calls to any C*Net or DDD world number. All 1+ calls are standard ten digit numbers. C*Net is 1+200+seven digits.

To use some of the lines, I also have a collection of more than 300 single line phones, a 20-line 1A1 key system and a 300-line 1A2 key system. I have over 300 key phones and a lot of payphones. When I started to collect phones and switching equipment, this was going to be a 200 line SxS system.



Thanks to help from others (the collection) grew a lot. I was self-employed, so I had more control of my time to run after the equipment as it was being removed. I was able to purchase the entire contents of a building, including schematics. I purchased three central office switches, about 2000 lines, and sold the excess in online auctions or shared with other collectors.

I started with the telecommunications industry just before the breakup of the Bell System on January 31st, 1984. I began with a 302 set and a 1A2 key system when I was in junior high school. For most of my career I was mostly self taught. I worked with many ex-Bell System people and was always willing to learn from others. After I sold my business and ended my self employment, I worked as a central office equipment installer. I learned the proper way to lace cables and build the superstructure for my central office.

As of 2010, I had made more than 30,000 hand wired connections in the 14-year project. I still had about eight more years to go. It would then be time to rip it apart, so in the future someone else will have equipment!

The long term plan was to place a call from an 1899 magneto phone connected to a turn of the century cord switchboard over the proper trunk to a common battery switchboard to the 3CL Toll Switchboard to either of the dial switching systems to a 2013 cell phone. This was my 100 year phone call. The entire call used the correct equipment for each part of the call.



