

Can You Top This?

By Stanwood C. Griffith

Continued from the Spring 2009 *First & Fastest*

While I was in college at Champaign, Illinois, in 1947-1948, I had a car. A group of trolley fans were glad to help me get some good out of it, and we used to do fantrips to Iowa. We did plenty to St. Louis too, but we had the Illinois Terminal to furnish the transportation there. Speaking of the Illinois Terminal, you may add St. Louis, and the St. Louis Waterworks railway. Not everyone has ridden this. On one of our Iowa trips we stopped at the Rock Island Southern Galesburg switching yard. They had a big beautiful box express motor bought from the Eastern Michigan Railway when they abandoned, but it was out of service. This car lives on though in the 2' gauge, half-scale box motor, on the Rock River Valley Traction line. This particular day they were switching with a CD&M passenger car with the back half of the body cut off making a freight deck. One of these Iowa trips was a Fort Dodge trip from Des Moines all the way out the Rockwell City line. This was the line where several months later, a Fort Dodge steeple cab with a train ran into the middle of another train already actively occupying a steam railroad crossing.

From Rockwell City we went back to the main line to Fort Dodge, then up to Fort Dodge, and east to Webster City. There was a very strong wind blowing from the northwest and the trip outbound to Rockwell was not too fast, but the wind pushed the car along at high speed to the east. We hit a piece of track that nobody had noticed at the slower speed, but one side was low for a couple of rail lengths. The car lurched violently, almost too violently for safety, and it threw us around a bit in the car.

While I was in the Air Corps, starting on my high school graduation class of 1944, I was inducted at Fort Sheridan, Illinois and got a first taste of the North Shore. I remember going over to the fence and peering through at the North Shore yards and a car that had been converted to a meeting place for the CERA guys. What a beautiful old arch-windowed wooden car. Too bad that it didn't survive the war.

Not being one to waste an opportunity, when I went to Chicago for induction, I rode the surface lines clear to the extreme southeast portion of town, the Indianapolis Ave. line, then a bus to Gary. The Gary Railways had three lines at this point. I rode the long North-South line but skipped the line to the tube works in favor of a ride on the long suburban/interurban line to Hammond. I am sure that this was a wise choice. I am not sure where this fits in, but I rode passenger and freights on all three of the Chicago interurbans, and many trips on the West towns, and as you should surmise, the Chicago Surface Lines.

The troop train trip to Sheppard Field at Wichita Falls in western Texas must have been uneventful, but on the way up to Wisconsin for radio school I saw a TE box motor at the Katy interchange south of Sherman. By this time I was a little more up

on my geography, and I was able to recognize to some extent where we were. I identified Muscatine, Iowa, and Moline, Illinois. Then we went through Clinton and up to Freeport, Illinois, all on the Milwaukee Road and then up the IC to Madison, Wisconsin. I'll bet it was fun figuring the routing for troop trains, and making the arrangements.

Later on when I was riding on and videotaping the Heisler steam engine at Freeport, I was able to tell the engineer that I had ridden a troop train through his farm during the war. This trackage was subsequently abandoned except for the museum trackage at Freeport. Actually, this trackage was all abandoned and removed. The fan group bought ties and rail and reinserted them on the old right-of-way and built a whole new railroad.

While I was at Madison, I took the Milwaukee overnight train to Lacrosse, Wisconsin. This was sort of an out of the way place and not too many fans got there. The service was all by arch-roofed cars with Max Traction trucks, one line. Also got my first taste of the Milwaukee Electric. One could never get too much of those interurban lines, and later on I owned Cincinnati Curveside cars 60 and 61 on the Speedrail.

While I was at Sheppard Field in Texas, I cast constant longing eyes at Oklahoma City, but it was just far enough away that I didn't risk going AWOL for a weekend fantrip. I could get there OK by hitchhiking, but I might have trouble getting back in time.

I did better at Boca Raton Florida. And got twice—these times by train—over to Tampa and St. Petersburg, two more Birney lovers' heavens. I think that, all told, I rode everything in these two towns.

On my way to Florida the troop train stopped in Marietta, Georgia, beside the Georgia Power Station and there was a two-car train taking passengers for Atlanta. If I had any idea that the train would take a two-hour layover in Atlanta I'd have been tempted to bail out and take the trolley. Bill Janssen did this, but he knew the ropes.

On my way overseas from Selman Field in Jackson Mississippi, I got to at least see Nashville and Chattanooga, Tennessee, and Birmingham, Alabama, from the train. I covered the latter two inch-by-inch after the war. I also saw the cars at Newport News from the train.

We got to Europe just after the war ended, and I got to see how the trolleys were resurrected from the rubble heaps left by the war. I have subsequently ridden almost everything—virtually all of the trackage—in East and West Germany, all but one operation in Poland, everything that even looked like a trolley operation in Czechoslovakia. I rode everything in Sweden, and this was when there was quite a bit of trolley in Stockholm and before they switched from driving on the left hand

side of the road. This caused a lot of abandonments. I rode to Malmo, Sweden on cars that had General Motors builders' plates. I wonder if they were imported from the States. I never heard of GM building streetcars, though they did build some trolley busses that I rode in Flint, Michigan, in 1941. I have ridden most of the light rail in France, last in 2006, most of the streetcar lines in Italy, Yugoslavia, Holland, Belgium, Spain, Portugal, all the lines in the Baltic states, and Helsinki. I rode Copenhagen on two different occasions, and a smaller operation there in Denmark, Arhus, everything in Sweden and Norway, and Switzerland and Austria, and the boat cars in England.

Bill Janssen and I used to go to Europe and ride nonstop for two weeks each time. We rode everything in Hungary and three cities in Romania. I had already ridden Sofia and Cluj in Bulgaria. I have also ridden Moscow and Saint Petersburg and Irtusk on Lake Bekail in eastern Russia, Hong Kong, and quite a few electric operations in Japan. I also more recently rode the automated crewless elevated in Taipei.

Getting back to the American continent, I rode Mexico City in 1941 and saw the cars in Puebla and Guadalajara. In Guadalajara we went by a car barn that only had three cars that were not out on line. I thought this was maybe some sort of record for equipment utilization. I rode the British Columbia interurbans and the streetcars in Vancouver. We covered the interurbans around Toronto on CERA fantrips back when they were running, and Ottawa, Canada, the interurbans to St. Ann de Boupre, and the streetcars and later the rubber-tired subway in Montreal, also the Montreal & Southern Counties. Speaking of Ottawa, their cars looked so much like the CSL that you can easily misfile your pictures. I can't account for this, but the management had forgotten to tell these guys that you could feather the air on the brakes. These guys with NO exception would just stop in a pile, terribly abrupt jerky stops.

Now to start the mother of all fantrips. When I returned from Europe the government allowed you a certain amount of time to wear your uniform, and I decided to work this for all it was worth. My first stop was Louisville, Kentucky. I don't know whether the New Albany-Jeffersonville trolleys were still operating or not, but in any case I didn't know about them. It is truly amazing how much more we know about various trolley operations now than we did when they were actually in operation. From there I flew by thumb to Chattanooga—one line—and then to Knoxville. The Nashville cars had been abandoned between my seeing them from a troop train and the big adventure.

Knoxville had two lines using Master units and curvesides. The trackage was just full of "dutchmen"—short pieces of rail inserted where there had been a low joint or some other problem. This method of repair was quite common on the lines that were to be abandoned at the first opportunity and typified the street railway scene in the war years.

There were master units four of which went to Iowa to the WCF&N for Cedar Falls service. The Knoxville operation was unique in having letter slots just behind the front doors, and you could mail a letter on the streetcar. The curvesides had two different kinds of trucks; one was the more common curveside archbar truck springing, and one kind had center leaf springs which stuck out from the truck frame to a sort of knee socket and certainly did not do anything constructive for the appearance of the cars.

My memory is not solid on how I got to Birmingham, but this was a real operating museum. They had cars from everywhere. Most of—maybe all of—the cars were single-end, and they had a residential line where they backed from a wye most of a mile to serve the end of the line. They had two—originally three—lines to South Bessemer which were suburban trolley at its best. Maybe a streetcar doesn't have to really hotrod to seem like it, but these two lines really flew. They also had Birneys. Strangely, I don't remember riding them. Birmingham seemed to have an inordinate amount of private right-of-way lines just all over town, and the service was very fast. The PCCs were on flatcars waiting to be unloaded and the scheme was that they would run paralleling trolleys and trolley busses with the trackless trolleys doing the local work, and the PCCs or other trolleys stopping at widely dispersed points to take transfers from the local stop trolley busses. I have never heard that this idea was implemented and it was not in evidence when I rode the PCCs at a later date. All in all Birmingham was a first class operation. In looking at my pictures, I find the only center door curvesides I ever saw, and the explanation is that the center doors were put in to accommodate the Jim Crow seating. This was one of very few companies to have air whistles on the cars, in addition to bells. They claimed that the motorists didn't pay any attention to the bells.

Atlanta got into the mix somewhere along here. This was not a real memorable operation. Well maintained cars and trackage. My main memory of it was that all of the streetcars had pneumatic sliding doors that went into a pocket in the car wall. There were also two paralleling heavy lines, one on each side of a mainline railroad track that joined at the outer end at a car barn in Decatur. The Stone Mountain interurban used one of these lines to get into town. It was still operating though the heavier line to Marietta had been sacrificed to the abandonment of the streetcar line used to get into town. This was summer of 1947.

I had been in New Orleans when my folks went to Florida in 1936 so I did not repeat this, though I have been back several times, the last time to ride the reinstated Canal Street lines. New Orleans has finally gone one-man. On one of my visits to New Orleans I saw a beautiful old center-door work motor which they used to sand the rails because the 1926 Perley Thomas cars do not have sanders. When they have a rain, the work car has to sand the whole line. New Orleans is an odd gauge. I think it is trolley gauge like Pennsylvania, 5' 2 1/2". New Canal Street lines are also trolley gauge. The Riverfront line took over railroad tracks, and they had to buy some standard gauge cars. They got a car from Melbourne and some other standard gauge cars and ran them there. As the system grew, the Riverfront line was joined to the

other lines. They changed the Riverfront line to trolley gauge and converted the car trucks. The New Orleans-Kenner line was standard gauge and the barn still has dual-gauge tracks. The Kenner cars never came downtown further than the Carrollton barn and you changed cars there.

I can't remember my exact route, but I think that I went from Atlanta to the Tri City Traction at Bluefield, Virginia. This was a typical low budget mountain operation, and they didn't have more than three straight pieces of rail in the system. The trackage was continual curves. We did not lose the pole anywhere but I'll bet that the trolley wire maintenance was a killer. They ran base service with three cars and a conductor swung at 1/3 and 2/3 points and took fares, while he rode the center 1/3. They had problems with snow on this line, and I saw numerous pictures of cars marooned in the snow. I believe that most of the cars were Cincinnati Curvesides. This was a line missed by most fans because of its off-the-mainstream location.

The Piedmont Northern was next. I saw a three car train out on the line, but they did not operate very frequently. I went to Greenville, South Carolina, (oops, I mean GREENVI) but couldn't find the station so I went on up to Gastonia which was the southern end of the disconnected northern line. I rode the entire length of the Gastonia franchise streetcar operation and was the only passenger in both directions. I'm sure that the motorman got lonely on that run. An interurban came in from Charleston so it would be a while until it left but I did not want to wait, so I "flew my thumb" to Roanoke, Virginia.

I really never had much trouble getting rides, what with my uniform and all. Roanoke had two lines, an old car line and a line using Masterunits brought over from Lynchburg. These were beautiful cars, very large vestibules with double doors on both sides which gave them a very airy appearance. They had an all-concrete car barn, roof and all, open on both ends. In later years we used to go visit our son who was a physician at the big hospital which was built partially on this trolley right-of-way.

From there I went to Norfolk. According to my pictures, Norfolk had double truck cars bought from Eastern Mass Railway and a limited number of Brill-built Birneys. I'll never be able to crow to Janssen now about riding Birneys there! Pity, pity! I had forgotten all about it when it was appropriate. Norfolk was another wide-gauge line.

Next to Richmond, Virginia. Here too we had Birneys, both single truck and double truck. This was a really first rate operation, hilly, extremely interesting and well maintained. The home of Frank Sprague's first successful trolley operation. Sprague was pushing the under-running trolley power collection. A guy by the name of Vandepole was pushing a double-wire system on which a little four-wheeled "troller" was connected to the car by a wire. This collected the power. It was pulled by this wire, attached to the car. The thing was called a troller, from which the term trolley was derived.

The Interurban line to Portsmouth had been cut off and the city cars served the inner end. I recall vividly the car I rode. When it got up to what seemed breakneck speed the gears made a piercing scream which helped add to the illusion of speed. Wow! Richmond had bought the newer cars from South Bend, Indiana. Bill Janssen told me over and over that they were noted for having brass sash. Anyhow they helped carry the wartime loading.

Next I went up to DC to visit my army buddy and ride the plow lines. He lived out at the end of the Wisconsin Avenue line and it seemed to me that those cars on that line which was straight and on a wide street just took off and flew. I got to run my first PCC car at the outer end of the Beltsville line. Rode a piece of the WBA line that had gone to DC's operation just before it was abandoned. Got to go down into the plow pits and watch the cars being converted from plow to overhead and vice versa.

It was just a high speed ride on the Pennsy to Baltimore. Baltimore was one of the high spots. They had multiple interesting lines and every sort of equipment you could imagine. One of the first things that caught my attention was a PCC car with trucks with spoked wheels. I suppose they couldn't buy parts for the trucks during the war, so they robbed an old car of its trucks or wheels anyway, and away we went. Baltimore was another odd gauge operation.

They had many suburban lines and some were just charming. One to Endicot Mills went through many deep rock cuts and under bridges, but the way that they did it was just picturesque beyond description. Then there was the Ft. Howard line which went across a long wood piling bridge and was served by PCCs running MU in three-car trains. The trackage at the Ft. Howard end was private right-of-way through the woods, and I much regret that I did not take advantage of it, but there was so much, each better than the last.

I also rode the successor to the WB&A Baltimore to Annapolis, and now the B&A. This was an historic line and interesting more for that reason than any other. The south end of the Baltimore Light Rail now occupies some of the right-of-way of this line. The multi-tracked WBA terminal was still in evidence in Baltimore.

The Baltimore & Annapolis had attractive steel cars that looked much like CA&E cars which they ran in trains. I had an interesting visit with the motorman, which in part got me an A later in college Industrial Psychology. They also had a good supply of freight trailers which probably didn't get much use after trucks got common. I have mentioned Richmond, Virginia and Birmingham as being outstandingly interesting, but I think the diversity of equipment and trackage certainly brings Baltimore high into the list. Even now, the light rail does all sorts of crazy things that make it notable.

Philadelphia obviously was next. At this time there was still so much that it just almost overwhelmed one. Philadelphia was another town where a few Birneys hung

on into late history. Not too many places had both Birneys and PCCs operating at the same time. Philadelphia was just a big, dirty town and not really notable from a trolley perspective, although the Germantown line did some interesting things, and the trolley subway was kind of unique.

I must have taken a sidetrip to Atlantic City. This was notable in being an all Brilliner operation and fast. The Atlantic City and Shore interurban was in operation at this time, but I did not know about it, more's the pity! Saw their cars lined up after abandonment at a later time.

Philadelphia did have some extenuating charms. The PST was intact at this point, and I had the experience on the long line to Westchester of riding in the trolley fan seat just behind the motorman when we hit a track torpedo. I nearly ejected through the roof and I am sure that I will never forget it. Bill Janssen worked at the Springfield, Illinois, station of the Illinois Terminal, back in the '30s. One night when not too many people were around he put a track torpedo, a "gun" as they were called, on the Birney tracks out front. When the Birney came it set it off and he said the noise was fearsome, and that it just reverberated in the waiting room. I asked, "What happened?" and he said "Nothing, the car just went on." If the motorman had come storming in. I'm sure that Janssen would have been no where to be found, as he was not the fighting type. He probably was laughing so hard he couldn't fight.

Most of us have fallen in love—maybe several times—but my first ride on the Lehigh Valley Transit was a love-at-first-sight situation. Here was the reality of a meandering roadside trolley, semaphore signals, single track with frequent passing sidings, up hill and down dale, down the main streets of towns, and all this with those beautiful FAST C&LE cars, on 30 minute headways. I hope that Heaven has something at least this good. They had intermediate barns with all sorts of far-out equipment around.

Now having said all this, the city lines in Allentown & Bethlehem were just the center of webs of long suburban lines. This was out of the history books. This sort of thing just didn't exist post World War II, but here it was. I just can't say enough good about this operation, and to top it off, the interurban to Easton! This line was purported to not have any fills or cuts. This may not be totally true, but almost. Then to top this off the neat Cincinnati Curvesides that ran there were just the right fit. They meandered along, along the roadside. This whole operation was not even real; it was too good to be real.

If it is possible to put icing on top of icing, the LVT ran a package express business in conjunction with a trucking company and ran three-car box express motor trains from a location on one of their suburban lines, through Allentown and then over the LVT and the P&W to Philadelphia. I don't know how good you can have it. Oh yes, I did obviously ride both lines of the P&W.

From Easton, it was an easy jump to Jersey City. I knew virtually nothing about this operation, and I didn't know how to find out, so I missed some of the cream there. When the train pulled into Jersey City we stopped next to a multi-track streetcar terminal of the PSNJ. Even now I will have to leave it to those in the know, how well I did. I did ride the line down the side of the Palisades, and across the iron bridge, so I probably did get the very best. I also rode the full length of the Orange line. These long lines were in fare zones, and at the end of a zone, the motorman would stop the car and collect fares from everybody. I think that they had a deal, where, when you got on near a zone break, you were issued a chit. I don't know whether this entitled you to go across free, or just at a reduced fare.

I also rode the Newark "subway" or rapid transit. Maybe not on this trip, but I rode the Yonkers lines of the Third Avenue Railway. I later rode in Brooklyn with Herman Reinke of ERA fame, so I am sure that we got the cream off of that. I also rode the full length of the Staten Island RT whose claim to fame is that both ends end with a ferry ride.

On a later trip I rode the Gladstone branch of the Lackawanna out of Hoboken and got to ride in the cab on the way back. Seeing all of that complicated wirework rushing at you in the terminal areas was frightening. Somewhere in my wanderings I rode the cab of a Budd RDC into the Washington DC terminal, and I got this same sense of almost terror at seeing all of this complicated overhead and thinking of what would happen if you snagged it at speed.

On my troop train trip from Brooklyn to Ft. Sheridan, I was able to do some railfanning from the vestibule doorway. I recall going under the P&W south of Norristown, and when we got to Reading the train stopped with me looking directly up the main trolley street. For some reason the train sat for quite a while and the traffic backed up for blocks. Included in this traffic jam were eight streetcars. In the direction in which I was looking, there were Curvesides, Birneys, old monitor roofed cars, everything you could think of. What a deal, money couldn't buy a situation like this. And there I was right in the cameraman's seat.

When I returned, most of the lines were gone, but not all. Needless to say I rode every inch left. Lancaster was next and the Conestoga Traction. There was a Birney line and a line shaped like a figure 8 left. It was in the evening, and I didn't get any pictures here.

My next stop was Meadville, Pennsylvania, to stay for a while with my best army buddy. After that it was Cleveland. This six-week trip was really divided into two three-week trips, and the routing and so on are of no importance. On the second time out I went to Pittsburgh and the West Penn. I have ridden cars all over the world, and each has its point, but nowhere holds a candle to Pittsburgh and the West Penn. There is nowhere else where two lines cross separated by several hundred feet vertically. Nowhere, where PCCs accelerated on 7-10% grades. It was incredible. I went there subsequently many times with Bill Janssen. We would start at dawn and

eat only when two intersecting lines would make it possible to transfer and grab an Isally's ice cream cone, at the same time, without cutting into our riding time. I was slim in those days.

I have raved about various systems. Pittsburgh had it all, except the diversity of equipment; it was virtually all PCCs. Pittsburgh had a belligerent trainmen's union, and they had the highest wages in the country, \$2.65 per hr. at that time. The company was forced to just fly the cars around town. This was fine where the track was in the streets and in good shape, but they had a lot of open track and it was not very well maintained. The result was a lot of rough riding, which was of course fine with us fans, but maybe not too sexy for the regular riders. Also this forced long headways. Here was another operation that had all sorts of improbable little lines into towns that didn't exist except on the map, shuttles, you name it.

Unlike Pittsburgh, the West Penn had absolutely pristine track, I can't recall any low joints or wiggly rail, but the hills and curves were incredible. The cars were big but hand-braked, assisted by magnetic track brakes operated off the controller. When TV began to come into the mountains, people began to stay at home and riding dropped significantly. The company didn't even replace the cars with busses, they just stopped. Actually there were few roads.

The cars didn't have any air on them, so they were relatively quiet. The reason given for this was that the grades and curves and all were so severe that air brakes would not be fast acting enough. They could apply the magnetic brakes instantaneously. Maybe that is part of the reason the track was kept in such good condition. They didn't want the brake bar to snag in a rail joint. They didn't worry about this in Pittsburgh, so I don't know. Anyhow, the West Penn was absolutely unique.

I don't remember too much earthwork in the West Penn's right-of-ways, but they had massive bridges. It obviously was not a cheap line to build. It probably was not cheap to operate either, considering the absolutely glass-smooth track. We stopped one day to pick up a guy who was hand-greasing the curves. He had a grease bucket with a long handled mop and he obviously walked the lines day after day.

The area was full of coal mines and abandoned lime kilns. They had so many lines that were just breathtaking that I did not ride everything there as I was told that such and such were not as interesting, so we rode the ones that definitely were.

Connellsville, to the south section of the line, had a number of radiating lines. One of them was a streetcar line to South Connellsville that was served by Cincinnati Curvesides that had been built in 1930 for another West Penn Power Co. line north of Pittsburgh. The state wanted to widen the highway and they bought the trolley right-of-way, so the cars were brought down to the mother company. That made three different types of cars; the little streetcars around Irwin, the Curvesides here and the mainline cars which were basically alike. Also radiating from Connellsville was a line that split eventually and one branch went south to Martin, which was a

nonentity. The line just ended, almost in a cow pasture. Evidently at one point there was a mine or something there but now nothing. This was a split from the main line which went to Brownsville. This line ended in the middle of a very major hill in Brownsville, and the pictures of cars laid up there are quite common and interesting. There was no evidence that any cars had gone on down the hill after the track ended, but it would have been a major opportunity for this to happen. Here is where the magnetic track brakes fit in, and I remember how the cars pussy-footed down this hill.

There were two other lines from Connellsville which I did not ride. More's the pity, but when there are such mind blasting rides, you can't do them all. You just skim off the cream.

From here, I am not going to follow my "Fantrip le Grande" because most of the rest I repeated over and over and I can't put them in any sort of order.

In 1947 I went with the University of Illinois marching band by train to New York City where we performed in Yankee Stadium and here and there. On the way, east of Rochester I think, we paralleled an interurban right-of-way that had steel inverted U trolley supports. The cars ran through the U. I think that this must have been the Rochester, Syracuse & Eastern right-of-way, long gone by that time.

Speaking of Rochester, when the Erie Canal was abandoned the right-of-way which went through the center of town was converted to be used as an entrance for most of the interurban lines radiating out of Rochester. It never got much use because all of the interurbans were soon abandoned, leaving the track etc. to be used by the Rochester street cars with some industrial switching downtown. The freight was switched with a 4-wheeled Plymouth. I suppose by now the thing is a multi-lane highway, never to see rails again.

On one of my trips I covered the Jamestown Westfield & Northern, an interurban in upper New York State.

Passenger service by big steel cars continued until 1947, and the considerable freight was handled at least in part by ex-Eastern Michigan box-express motors. These were unique looking because they had an open vestibule on the rear, I suppose for the switchmen to ride in or on. I don't think that many fans covered this line, though it lasted until well after the war.

The International Railway at Buffalo was not notable except for the large number of double-truck open cars that they still had. I think of Buffalo in conjunction with huge amounts of snow, not open cars. I don't have any snow equipment in my pictures, but plenty of open cars.

I have already covered Brooklyn, except for a funny story. The Public Service of New Jersey operated dual-service vehicles that were a hybrid of a trolley coach with

a gas engine so they could run off-wire. They got a charter of six busloads of people going to Coney Island, and someone got the bright idea of borrowing a little boost from the Brooklyn Trolleybus operation. When they got into Brooklyn, up went the trolley poles, off went the gas engines, and away they went.

While we are in the New York City area, we must cover the Queensboro Bridge Line, a streetcar serving Welfare Island and Queens Plaza via a right-of-way on the bridge superstructure. They bought four Master Units from New Bedford, Massachusetts when they abandoned, and they ran until well after the war. I don't think the line ever went anywhere else, just back and forth under the bridge.

The Hagerstown & Frederick was another interesting operation. When I first went there the line had been broken in two, and a suburban service operated out of Hagerstown on the west end of the line. In my notes under the photos, I have noted that these cars almost required a ladder to get aboard. I also noted that this extreme clearance under the cars obviated the need for the crew to walk around the ends of the cars. They could just go under without hardly stooping. You probably think this is an exaggeration, but scarcely.

The area eastward to Frederick consisted of long rather steep hills, a bit like the West Pennsylvania and the cars must have labored mightily to go up, but going down should have been fun. I had paralleled by highway the line going maybe 10 miles west from Frederick to Myersville. This lasted until 1954, and it fit this description exactly. The company also ran a line 18 miles to Thurmont, Maryland, where they connected with the Western Maryland RR and interchanged freight as well as passengers, mail, etc. They had cars leaving the Frederick station at almost the same time to Myersville and to Thurmont. Since service was not too frequent, this illustrated perfectly the stupidity that caused a lot of railroading's problems. Why pay two crews to sit around most of the time when one crew could have done with staggered leaving times.

Well, I had already come into town parallel alongside of the Myersville line, so I decided to go to Thurmont. This was a disappointment to me because the line was almost flat and not very interesting. The H&F was the steam road connection into Frederick from the Western Maryland and to switch this, they bought a W&OD Baldwin steeplecab, with four 100-hp motors from the army base at Langley, Virginia. I never knew of an electric military line, but this evidently was an exception. They also bought about this time a beautiful old RR roof box express motor numbered #1 that had been on the WB&A as a passenger car, then Capital Transit in freight service. It had four 140-hp motors so it was a better unit than the steeplecab.

I'd better report on Boston before I get involved with all of the Pennsylvania lines. I was too late for the Eastern Mass cars, but there were, right after the war, some lines that had become Boston MTA. The three-car PCCs MUed into trains were of interest. The trolley subway was of interest, too. I believe this was the first use of

trolley subways, and it was a bit primitive but interesting for all of the abrupt track changes. I was there one time during the service by the Boeing cars. They rode and performed well from my viewpoint, but were not a success. Also rode the Boeing cars in San Francisco. The maintenance was excessive. Evidently street railway service is not easy on cars.

I had a friend who also had done a lot of trolley fanning just after the war, and he was telling me that he had gone way up into Maine to ride the Aroostock Valley. When he got home he discovered that he had not removed his lens cap while doing all of that photo posturing and riding. He was not pleased!

Johnstown, Pennsylvania was one of the first orders of all electric PCCs. This was a relatively small operation, but they bought 18 new cars. While I was there an instruction car (PCC) went by and picked me up. Remember, I was still in uniform at this point and this did wonders for me.

Anyhow the instructor was going on about the “DYNAMOMIC” braking, and I was wondering how competent he was in other subjects. We had a fan trip charter in Johnstown one time towards the end of service and there was a switch at a major junction in the center of town. And it was hand thrown. The explanation was that it was really a power switch, but it was not well drained. Every time it would rain, the switch would throw water all over the people waiting for the trolleys, so they solved the problem by making it a hand throw. Our fantrip took us over a major bridge built after the war. It had streetcar rails in it but they were probably not used more than a few months. A pretty expensive deal.

Johnstown put up trackless trolley wire and then used them less than a year before they went diesel bus. Seems to me as though there was a little vacuum in the management. They were able to buy their trolley busses second hand so they did not suffer too much there, but putting all that overhead was not cheap. The rail in Johnstown was very good. They had these new cars, so I don't know what the reasoning was in abandoning the lines. I think that the cars were bought by some guy and sat in a field outside of town for years.

Johnstown had an alternate line to the one down the main street in the center of town. It was single track with turnouts and wound around a bit, and it was not signaled. Because of this the cars had no way to know where their meet was, so they equipped them with an early form of mobile radio to arrange meets. Since this line was used as an alternate to the main line, I would suppose that all the cars in the system that used this trunk line had to have radios. I don't know of any other place where they would have to be used.

The mirror image of Johnstown was nearby Altoona. This was the most broken-down operation that I had ever encountered. The track in particular was past the stage of being broken down. The company was just plain worn out, but to excess. There was a piece of rail in a major trunk line passing the barn that was worn clear

to the web. It only had half of the tread left. At least one of the lines was railed with odds & ends of pieces of rail. It was near the end of the line so they didn't run very fast there, but it was incredible. One of the only good lines there from an operational standpoint was the double track line to Hollidaysburg where Pennsy had their big shops. The line was unique in that all of the lines went around a big long oval in the downtown and radiated from that. I guess maybe it eliminated a number of major crossings and switches.

In general trolleys lasted longer in Pennsylvania than most places, because they had a state law that said that if you discontinued a trolley, you had to remove the rails and repave the street, so it was cheaper to run the trolleys.

Ohio had been a major interurban state, but this all went down the drain rapidly. The only significant line still running was a coal hauling line, the Youngstown & Southern. They also had passenger service still in 1947. Some of the trackage of the Y&S became part of an automated crewless electric railway serving a coal mine in the boondocks of Ohio. There was subsequently another "automated" electric line, in theory with no crewman aboard, hauling coal 25-30 miles to the Four Corners Power Plant in southwest Colorado. Janssen and I were along this line taking pictures of the big ex-Amtrak passenger motors that powered these trains. These Amtrak motors had a charming propensity of leaving the track at high speeds so they were available, and they were great for this low speed heavy coal hauling. If there was nobody aboard, how did they know about us? Anyhow, a pickup truck came sliding to a halt by us and we were informed that we were on Four Corners' property and that we should remove ourselves immediately.

On this same trip we went to a Molybdenum mine in the Rockies. This was served by a 42" gauge electric railway that went 15 miles into the mountain but then emerged for some outdoor running getting to the mill. These motors and cars were relatively small, and the motorman was in a little space about the size of a phone booth. This sure didn't appeal to me.

Later we did the Denver Light Rail and the Ft. Collins railfan Birney operation that runs in the median of a street that had been the line to the city park. Ft. Collins kept their Birneys longer than hardly anybody and was the home of the three-way meet at a Y in the middle of town. This is a very famous meet, and everyone has seen photos of it. I rode here frequently while I was a student at Denver. Birneys, get the picture!

On one of my troop train journeys, we went through Barberton, Ohio, outside of Akron. Lo and behold there was a trolley along the railroad. By the time I got there, there were trackless trolleys that were so new that they did not yet have the governors on them. The driver told me that they would go 60 mph and demonstrated. Went by the carbarn with all of the cars in storage, but there was no use in getting off.

Finding pieces of operating freight trolley was not real easy. Somehow I found the remains of the Fostoria & Freemont, which had been the Lake Shore's entry into Toledo. They had a beautiful big steeple cab that they used to switch coal to a power plant. This motor had come from the Wilkes Barre & Hazelton and was rather unique in that the two trucks were coupled to each other and the drawbars, without going through the car body. I think that this motor is now at the museum at Columbus, Ohio. The Toledo & Ohio was also largely intact, and you could ride along its length on the NYC, but it was no longer juice. Toledo had two or three lines running, and Detroit had a bunch of stuff running.

Dayton, Ohio was a unique case study. Each of several interurbans which radiated out of town had its own city service, usually on the interurban tracks. When the interurbans abandoned, most of these went trackless trolley. When I was there the city service consisted of several ex-C&LE trolley lines, plus several diversely owned trackless trolley operations. At one time there had been city service by 8 different companies at the same time, many of them trackless trolleys.

Maybe in the late 1950s, I did a building at Wright Patterson field, at Dayton, and the C&LE right-of-way was obvious outside the east gate. I had a rental car and did a good bit of trolley reminiscing. The building which had been the C&LE main shops was one of two adjacent identical buildings, so although I can say that I saw their shops, I don't know which building it was. I also looked for the scene of the airplane/trolley race. It was all built up, though you could see the right-of-way, with a gas station straddling the tracks.

I found in snooping around in a field west of Vandalia, Ohio, maybe eight or nine intact CH&D steel car bodies, nicely spaced out and on blocks. Since the roll signs were of no consequence at this point I liberated one. My notes say that these were built by Kuhlman in 1927. Numbers 100-104 were rebuilt at Morraine shops (C&LE Dayton) in 1931. #106 was never rebuilt or repainted.

I found another fan in Dayton, and he took me to Cincinnati to a trolley meeting. We went along the C&LE right-of-way as much as possible. He showed me some of the stations which had been built for the Cincinnati subway which got mostly built, but never operated.

Cincinnati was in a class with Havana, Cuba, in having a double overhead for the tram lines. In the early days of trolleys the rails were not well bonded and the return current used water lines and anything available for ground returns. This corroded the galv on the pipes and played games with things, and outraged the public. The franchise required them to have the current return by wire, thus the double overhead on all but one line, which presumably was built later in a more enlightened age.

Cincinnati was one of a relatively few properties to operate an open top sightseeing car. It even had a name, "Hiawatha," and I was privileged to ride it. Cincinnati had a bunch of old monitor roof cars with coal heat and stovepipes going out through the

roofs. I hitchhiked into Cincinnati one time, and we came to a trolley line. I offered to get out, but the driver said, "No, you don't want to take a streetcar. I'll take you to something better," and he took me to a trackless trolley line. If he had only known!

Cincinnati had a big system, and in spite of the cumbersome overhead system, it worked well. Cincinnati was quite hilly, and they had a unique cable lift deal which took a whole streetcar up the side of a big hill on a flat deck on rails.

They had bought sample cars from Cincinnati Car Company, a local establishment that would have been glad to have the business. They also had a sample Brilliner. These cars all worked well but they decided on PCC cars and these samples remained in service as orphans, though their appearance was not much different than a PCC.

Across the river at Newport was the Cincinnati Newport & Covington. These cars entered Cincinnati across a big bridge across the Ohio River, with a fancy terminal. The surviving line was a largely private right-of-way line going off to the south and requiring four cars for base service. When I rode it one time, there had been a traffic tie up and three of the cars were running right together, so I got some rather unique pictures.

The CN&C had a very unique and beautiful four-wheeled car that had been built as a private party car. It was something, and I got to see it in the barn. For some reason this thing got cut up for scrap. I can't imagine the stupidity that would cause such a decision as it was strictly a one-of-a-kind car, a work of art, and should have been preserved. Someone would have paid a pretty penny for this.

Cleveland probably had the biggest city operation in Ohio and one of only three, four-track operating thoroughfares, with New Orleans and San Francisco being the others that I am aware of. Milwaukee had some four-track, but two were interurban and two trolley, and they were on the edge of town.

Cleveland had a group of early day three-trucked articulated cars that were in storage at a barn when I saw them. I don't know whether they were operated at this late date or not.

Detroit was another that experimented with articulated cars at a relatively early date. Now they are the norm in Europe, with as many as 7 bodies with various truck arrangements. These things get to be almost a block long, huge articulateds, and do they haul the people!

Milwaukee was one of the other pioneers with the articulated cars. I'm not sure about the city operation, but the interurbans had two classes of artics. When the Indianapolis South Eastern bought the curvesides, their big heavy steel cars became surplus and the Milwaukee Electric bought all eight. They made them into two-car articulated units which were called "Duplexes" in Milwaukee. The craftsmen in

Milwaukee Electric's Cold Spring Ship built two new Duplexes that were dining cars in the rear section. I rode one of these Duplexes to Port Washington during World War II.

Evidently the company was satisfied with the performance and efficiency of articulated cars, because they bought ten lightweight articulated streetcars to use in South Milwaukee service. These lightweights later went to Speedrail and ran to Hales Corners and Waukesha. Designed for suburban, not interurban service, Speedrail operated them too fast resulting in the motor bands bursting and had to initiate a speed limit on them.

Cleveland was also the home of the Cleveland Interurban, a Van Sweringon property which ran from the traction terminal at Union Station downtown eastward and then split into two lines. These lines are still (2009) in service.

These lines were originally operated using trains of Cleveland street cars, then they got the six curvesides that had been bought by the Indianapolis South Eastern. These ended up on Speedrail and I owned two of them, numbers 60 & 61, as a favor to Ed Tennyson. They also operated ex-Aurora, Elgin & Fox River Electric cars, two of which ended up on Speedrail and one is preserved at the Illinois Railway Museum.

Later the line became known as the Shaker Heights Rapid Transit and was operated with ex-Minneapolis PCCs and currently with cars from Breda in Italy. At one time they owned a whole fleet of ex-Toronto PCCs but I don't know what the disposition of them was. I don't think these ever actually ran here.

Although the Cleveland Rapid Transit was never a great financial success, they were the test bed for the development of what is now known as "chopper control," and we got this test car for a fantrip once.

Obviously I rode Indianapolis a number of times, but I missed the all-Birney operation at Kokomo. It was there after I was in school at Champaign, and I thought that I'd just hop over and see it some weekend. The first thing I knew, it was gone. There had even been a big deal when it was abandoned, and I was not aware of it, grrrr! Everything considered, I did real well, but you can't bat 1000.

Ft. Wayne was not outstanding for anything except that they were wiring for trackless trolleys, and in places where they shared a wire with the trolleys, the streetcar wire had not been moved yet and the trolley busses ran down the street with their poles spraddled out strangely.

While I was in school at Champaign, the CERA had a big fantrip to the Texas Electric. A whole group of us went down to Dallas on the Katy. The train got into Dallas early morning, but I got off at Sherman, the north end of the line, to take an extra little TE ride. I had to wait for the first car out in the morning (5 am) and it came in from the south. I had to wait quite a while and I got to look over all the RPO

cars in the yard, and the other goodies. As the car approached the lights dimmed and you could tell every time the motorman notched up. A woman and I were the only passengers out of Sherman. I really enjoyed this unexpected extra ride. I don't know why no one else availed themselves of this extra goodie. In those days Lovers Lane was about the north side of Dallas, and Plano was way out in the country.

Dallas was another town with Birneys and joined Philadelphia as having PCCs and Birneys running at the same time. The Dennison-Sherman line to the north came into town over a single-tracked Birney line. We overtook a Birney on the line, and he pulled through the switch onto the single track, backed into the other side, and let the TE car go by.

The TE was an amalgamation of a 1200 volt line south to Waco and a 600 volt line north. Not all of the equipment was set up for both divisions, but some had cut-out switches so that they could run either division. The TE had developed quite a freight business and ran several box express runs each day with LCL plus steam road interchange. The company never lost money, but they could see the handwriting on the wall and quit while they were ahead.

The new Dallas Rapid Transit uses parts of their right-of-way to Plano, which is just one continuous city with Dallas now. On the south the shops, which were quite a rural ride then, are now way into the town, and the Rapid Transit goes right by the building. I have videos of various TE earth works and concrete structures which are visible from the RT.

The TE ran streetcars in various small towns, on the south line and continued to run a streetcar out of the big terminal at Waco, out to a junction north of town where the streetcar left to serve a small town. I often think about different places where even as late as World War II you could ride an interurban between two street car operations. Dallas to Waco was one, obviously Chicago to Milwaukee by North Shore was one, Pittsburgh to Washington, PA was one, and Philadelphia to Allentown-Bethlehem was one. I can't think of any others.

I had a fellow Toastmaster who was a trolley fan and his dad had been a motorman on the TE until the end. His regular run was the afternoon box express freight run Waco to Dallas. "Tex," as we obviously called him, told about his dad hiring out on the line north from Dallas. The hires were told that the unforgivable sin was to run a meet. Well, dad did! He caught it and backed into the clear, but the sin had been committed, so he quit before they could fire him and went to work for the line to the south where he obviously stayed for a long time.

Dallas, in addition to the rapid transit, has the McKinney Ave. fan group who managed to interest the merchants and hotels on McKinney Ave. in having a heritage streetcar operation. They bought a car from Porto, Portugal, and a Dallas Birney and some other stuff and operate a very successful small street railway that intersects with the RT at one end. This is an interesting study in what can be done.

The line is run through the week by volunteers, with Dallas Transit employees filling in extra runs. The line has even been extended and has a new and better car barn with cars being rebuilt for service.

I did a building in Dallas and had a rental car. I hope that I never drive in Dallas again. Some streets are by the compass, some are off 30 degrees, some 45 degrees. It is the most confusing mess you can imagine, and no matter where or how you drive on the expressways, you find pretty soon that you have driven down an off-ramp, and you cannot find any possible way to get back on.

You can see that the traction is the only thing that I can say good about Dallas. I had a neat thing happen, though. I found out about a guy who was one of the big lights in the then-to-happen McKinney Ave. thing. I went to see him. At that point his house was way out in the country north of Dallas, and he had a sort of farmette, where he had a place to rebuild the Dallas Birney for the McKinney Ave. thing. He took me into his house to show me his collections of stuff. It was filthy! He said rather apologetically, "I know my wife is a slob, but she is a trolley fan so I put up with her."

One year, 1948 maybe, I took a week-long trip southwest of St. Louis. I must have taken this on spring break, otherwise I would not have had a week off. Instead of going to Florida for a sexual orgy, I went on a trolley orgy. My first stop after the long Illinois Terminal ride to St. Louis was at Rolla, Missouri, to look at the still operating remains of a line that had an internal combustion double truck loco with side rods.

Somehow I had found out that a physician in Rolla was a trolley fan so I went to his office. I sat in the waiting room for a long time as the patients moved through the line. Finally he came to me and asked what he could do for me. I said, "Well, I think that I have something wrong with my head. I'm a trolley fan". He gave me the funniest look as though he thought I was serious. Finally he caught on that I was pulling his leg and off we went to look at the locomotive and eat lunch.

This trip took me to the Kansas City & Kaw Valley, which by now was a switching and terminal operation in southwest Kansas City, Kansas. Then by Katy train on to Parsons, Kansas. There outside my hotel was the track and trolley wire of the Union Electric, as though a car would come rolling down the street any minute. I found that the passenger service had very recently been abandoned but that there was still freight switching in Independence. Out went my thumb and pretty soon I found a switch crew shuffling cars. They let me ride with them and this was very interesting. If you will look at old photos you'll find that most freight cars and all locos had a big reinforced dimple on each corner and under the tender, or on the side of the motor was a pole with steel bands around the ends. This was used in "poling" cars, which was a maneuver where the loco ran on a track parallel to what was being switched and pushed the car(s) using this pole. They were poling some cars so I got in on a thing that most people now don't even know existed.

Once more I flew my thumb with Oklahoma City being my destination. The highway paralleled the trolley line (Union Electric) through very sparsely settled arid country to a little town called Nowata. It could have been named appropriately "Nowhere." The line ended there with little ceremony, and I couldn't help thinking what an appropriate name that was-Nowata.

Oklahoma City had just discontinued the city lines and the cars were at a barn. They had almost every sort of hand-me-down equipment you could name. One of the car series was a modern looking car with inside frame trucks that were unusual for street railways prior to the PCC. Made for a really attractive car design.

The interurban to Norman was still running and the first car out was an ex-Ft. Wayne-Lima car. This was one of 6 cars built in the mid '20s and sold to Oklahoma City in 1932. This was a moderate speed line as most of the cars built in the 1920s were lightweight with 35hp motors and would run about 40 mph, if they were lucky. On the way back to Oklahoma City, we went in the hole and an ex-Rockford car came roaring down the line on its way to Norman. This was as close as I came to a Rockford car, wish that I could have ridden it. I had no way to know it was on the line, or maybe I could have flagged it.

From Oklahoma City I went to Sand Springs and the Sand Springs Railway. This line was owned by an orphanage and its profits went to help run the orphanage. They had developed a big carload freight business and the line was lined with industries switched by the Railway. One of their cars is now in a barn at the Illinois Railway Museum. From there it was only a skip to Tulsa. How I found the Tulsa and Sapulpa Union I do not remember, but anyway they were switching with a handsome box motor bought from the C&LE.

Somewhere in here I covered one more Birney property, Little Rock, Arkansas. This was a pleasant small property marked by a sort of unlikely manner of operating for a smaller town. I mentioned how the schedules were so fast in Pittsburgh. This was the same unlikely situation but with older equipment.

The typical method of acceleration here was that the motorman would take one point to pick up the relays etc. and then slam it against the pin. The lines were typically single track on the outer ends, with turnouts protected by Nachod signals. It was a game that they played to go as fast as they could so that they could get the board and stick their buddy at the next siding. It was really sort of fun, but hardly how you expect to run a railroad. As an example, we stopped at a corner to let off a passenger. There was a lady running down the street, waving at the car to get him to wait. I mentioned it to the motorman, and he said, "She can get the next car," and away we went top speed to screw your buddy with the signals, or to keep him from screwing you with a long wait at a siding. Anyone who could get on a car did get a fast ride.

One more line to cover and back to the books. Hutchinson, Kansas, was the home of the remains of an interurban that was now owned by a salt company and used to switch some industries there, predominately salt. They had three of the neatest little steeplecabs with inside frame trucks. These gave the units a special look. Here again, I can't imagine how I found these lines, being I was traveling on foot, and I didn't have any prior knowledge of anything.

I'll continue with trips made while I was a student at Champaign. I gritted my teeth and suffered through an Illinois Terminal ride, Urbana to Danville, where I got the C&EI to Evansville, Indiana to the Cook Transit. This was a switching remnant in Evansville of the Evansville & Ohio Valley. The equipment was parked this day, so I didn't really ride the line, though I did photograph it.

On one of my adventures, later in history, I went to San Antonio and rode the fan line that ran an ex-San Antonio car on the electrified switching thing that switched the Pearl Brewery there. The car was nicely restored, and I later rode it with Janssen and Norman MacDonald on a scenic line south from Portland, Oregon, where they powered it with a diesel trailer. It was not quite prototypical though because San Antonio had been a 4' gauge operation, and it was now obviously standard gauge.

This brewery switching line had a nice looking steeplecab and one of the homebuilt center cab motors from the TE. The TE had a big shop, because they were a big railroad, and they did all sorts of things there. I never heard of this anywhere else, but when they would take a car out of service to rebuild it, they would retire the number to save on insurance. When it came out, it would get the number of the next rebuild, thus they were constantly playing musical chairs with their numbering system. I don't see how they ever kept track of anything with this constant renumbering going on.

Will this thing ever end? I got married and went to Denver to attend Denver University. It was nicknamed "tramway tech" because in the days of trailers, they would hire Denver University students as conductors. This was an ideal situation because the students were glad to get part-time jobs, and the Tramway didn't have to pay union conductors a lot of stand around time.

Denver was 3'6" gauge like LA and Portland, Oregon. Their cars were all locally made and were mostly Peter Witt style with a center door for exit. The Tramway owned a coal mine north of Arvada, a suburb, and they had freight trains that brought coal to the power plant. This homemade power lasted to the end. The mine also had standard gauge tracks that connected to the Colorado & Southern after the coal was hauled by the narrow gauge steeplecabs about four miles to the Interchange at Arvada. I never saw them run any mixed gauge trains, but they did not have an idler car. I don't remember how the coupling thing worked.

Not every run went out to the mine. Some backed into the Arvada station about three blocks from the line and turned there. I found out that there was a Saturday turn out

to the mine. Almost nobody ever rode this tag end except at shift changes, so I would go most Saturdays and the motorman would let me run the car on this outer end.

The freight trains were interesting in that they would go on streetcar track in Denver on the way to the power plant and go around regular streetcar curves. Now and then a car of coal would go through the downtown to S. Broadway and out this line to the Broadway shops, a huge complex which was the main shop. In winter this happened more often because this coal was used to heat the complex. In the summer it was just used for the forges to make parts for the cars. They had center cab work cars which would pull these cars to the shops. Denver had more kinds of odds and ends of equipment than I had ever seen anywhere. For example, they had an old funeral car body on a flat that they used for a caboose on the Leyden coal trains.

The Tramway also had a standard gauge line to Golden that handled interchange freight. Both divisions had three steeply cabs to handle freight, and the standard gauge Golden line had three old railroad roofed passenger cars numbered 23, 24 and 25. Number 25 was bought by fans and has been restored and is parked on a track in the old armory. They also had two cars which were similar to and in the 800 series narrow gauge cars, which were cars locally built for service to Aurora in the 1920s.

The narrow gauge interurban cars were numbered .01 through .06. Note the decimal. The Leyden line split south of Arvada and a line went "the back way" out to Golden, which thus had two lines running to it of different gauges. Unique! The narrow gauge line went through a very desolate, rocky, mountain valley along a stream, and it was very photogenic. Both lines were on a one hour headway.

There was also car 126 which was like a city car, but souped up and filled in on the narrow gauge lines to Arvada. These cars had air horns which were pretty loud. This odd car also was used on occasion on city lines. A motorman was telling me in a very humorous manner about having this car on a line on a narrow street. There was a woman mowing the grass, and she was leaning over the hand-pushed mower just at the edge of the street as he went by. He gave her a blast on the horn and his description of her reaction was just hilarious.

I could go on and on about Denver. One of the unique things was the method used to get the trackless trolleys to the Broadway shops. A lot of lines had been converted to trackless trolleys prior to the war, but nothing to the shop. They invented a way to put some sort of skate on the busses and thus use the trolley rails as a power ground. The Broadway car line was straight, so the busses would go on the trackless trolley line as far as they could and then go straight on to the shops using the trolley track for ground.

The last place we lived gave me an alternative ride. I could walk about five blocks to a trackless trolley line, or about 8 blocks to the Aurora trolley line. Usually I went the trolley way, but one day I rode the trackless trolley. This line went down a steep

hill, and then around a 90 degree corner. The driver was telling me that he had missed the turn one day but was able to coast the bus around two sides of the block and get back under the wire. Close call!

My wife and I went to Salt Lake City one time. In her younger days, she loved to ride roller coasters, so naturally we had to go to Saltaire Park on the Salt Lake. It just happened that there was an interurban line running there. It very seldom rains in that area, but this day it did, and the car roof leaked. She remembers how I was in ecstasy over riding in an interurban where the roof leaked.

The Saltair Line hauled trains of open trailers behind these cars out to this amusement park, so it was a pretty big deal. The wood-framed roller coaster was the only double-track rollercoaster that we ever encountered.

I also stole time to take a ride on the Bamberger. The car was one of those that came from the Fonda, Johnstown and Glover in upstate New York and had the strange looking roof end like the Philadelphia & Western Bullets. The only design problem that I had with these cars was that when you rode with the front windows open, the air horn just deafened everyone in the car.

It seems as though I ought to be winding down eventually. We rode the British Columbia Electric Chilliwack line, the city cars and the open air sightseeing car. I rode the two interurban lines out of Portland, plus the narrow gauge city cars. We rode all of the cable car lines in San Francisco, plus a lot of the streetcar lines. I have since ridden the automated roller coaster that they call a rapid transit in Vancouver, the light rail in Sacramento, San Jose, and Denver, Baltimore, San Diego, St. Louis and Minneapolis etc. and the heritage line in Memphis.

I rode the two lines in Anaconda, near Butte, Montana, which I doubt many fans have done. One line wandered around in some residential back yards, but the main line consisted of motorcars pulling trains of trailers, four or five as I recall, up the mountain to the smelter at shift changes.

I am absolutely astounded at the number of lines which I have covered, and I am sure that I will think of more, but this gives you an idea of the lengths that a “dyed in the wool” trolley fan will go to pursue his hobby.

As a postscript it wouldn't be inappropriate to bring in some of the trolley museums that I have graced. I ran the interurban for 13 years at the Illinois Railway Museum. I also ran the car as needed at Mt. Pleasant, Iowa, at the Threshermens Reunion Park. I liked this a lot better than IRM, because the line went up and down and round and round, and it was a lot more fun. I've also ridden at the museum at Columbus, Ohio, the Pennsylvania Railway Museum, the museum at New Haven and also the one in Maine, plus the two at Minneapolis, Minnesota, add St. Louis, and the Fox River Trolley Museum in South Elgin, Illinois.

A further little game that one can play is, considering that not many of us date back before World War II, in the immediate post war years, where one could ride streetcars, board an interurban, and then ride streetcars in the second city?

I have done all of these, and there may be more, but for starters, I have already talked about riding Waco, Texas, one line, then taking the Texas Electric to Dallas for more riding.

Another that I have talked about is the Chicago Surface Lines, then North Shore to Waukegan then North Shore to Milwaukee. But consider this: get on the South Shore in South Bend or somewhere and ride to Gary. There were at least three lines running through the war. Now, back onto the South Shore and go to Chicago for the Surface Lines, then on to Waukegan via North Shore. Counting the streetcar line to Great Lakes Naval Training Station this will take a while. Now, back onto the North Shore to Milwaukee and then on the Milwaukee Electric interurbans to wherever.

Illinois seems to have been the center of a lot of these goodies. How about a Birney ride in Peoria, thence to St. Louis via Illinois Terminal? Speaking of Illinois, this may be an exaggeration, but take the Chicago Surface Lines to the Chicago Aurora & Elgin on the Garfield Park "L," then to the western suburbs and the Chicago & West Towns streetcar system.

Now back to Pennsylvania, take a ride on Washington, PA's several lines, then get onto Pittsburgh Railways interurban and smile all the way to Pittsburgh and hang on tight while those PCCs whip you around town.

Pennsylvania had another, "Ride around Philadelphia" ending up at 69th Street terminal of their rapid transit system. Get on a Philadelphia & Western bullet for Norristown where you wait for an Lehigh Valley Transit "red devil" for Allentown. These were the Cincinnati & Lake Erie "Red Devils" so named for their paint scheme, speed and ability to nail automobiles at crossings. They were painted an attractive cream and red on the Lehigh Valley Transit. Ten of these cars had automatic acceleration of which six went to the CRANDIC which was flat, and they worked fine. Ten had manual acceleration and fit the hilly Lehigh Valley Transit better, though they managed to make the other four with automatic acceleration work. When the line was finally abandoned they had only four of these cars which were capable of holding down a run. (I'm sure they suffered from a lack of maintenance when they were expecting abandonment.) The lines around Allentown-Bethlehem were like the long suburban lines of long ago, and each one was a separate adventure. If you are an adventurer, you can take the Lehigh Valley Transit interurban curvesides to Easton, an interurban ride that purportedly had no cuts or fills. I'm not real sure about this, but it sure was a nice ride, and the curvesides were an ideal fit for the service. At least two of these finally wound up on Speedrail in Milwaukee.

Now for one that I'll bet some of you forgot. Scranton had a fleet of real slow, but otherwise well designed Master Units (35 hp motors) with real soft seats. When you got tired of these, you went to the Lackawanna & Wyoming Valley station and got the third rail cars to Wilkes Barre.

I pointed out flange scars in the street off the end of the track on what was the remainder of the Wilkes Barre & Hazelton interurban. I asked the motorman about it. He "fessed up" that he had made them one night and that his switch iron was barely long enough to ground the car to the rail and get it back onto the track.

This is sort of a thing that is as far out as trolleys, but rest assured that I've ridden the Illinois Terminal rail bus to Grafton several times, and Colorado's famed Galloping Goose. When I was in college, we would take weekends and go down and ride the Galloping Goose. This probably is about as far out as one can get, and through scenery as near to Heaven as we will get here.

In 1941 before Pearl Harbor my parents had decided to drive to Mexico City for a vacation. Evidently the plans had gone forward because sometime before Christmas we were in the car heading out of the country, for me the first time.

The first foreign trackage we encountered was in Monterrey. I say trackage because the trolleys and wire were gone. This was my first exposure to "gutter running." Where there wasn't much automotive traffic the cars could run against the flow of traffic. I later found a good deal of this sort of thing in Europe.

Mexico City was almost 100% streetcar at this time, and they had all sorts of ancient and interesting stuff on the streets. I even saw car number 1, a four-wheeler, on the streets.

We drove over towards Veracruz and at some point between there and Mexico City, maybe at Puebla, we encountered a really decrepit double truck car on a line in the street. I have a picture of this but no identification as to location.

We got to Guadalajara and found the cars still running. I remember going past a car barn with only three cars not being used. Talk about car utilization.

I have since ridden the subway in Guadalajara and also in Mexico City. The Mexico City subway is rubber-tired and is NOT real quiet. They run eight car trains on two minute headways, which is the amount of time that it takes to turn the train and reload at the end of the line. In Japan they have refined even this by changing crews so that the headways can be the time it takes to unload and reload. Not much.

My next foreign exposure was by the courtesy of the Air Corps. The first city we were in that had any operating strassenbahn was Frankfurt. This was just shortly after hostilities ceased and the place was a mess, but some of the trunk lines were operating. A giant step from what it is like now, but more later.

The next adventure in a town was Munich. The trackage at that point ran down the big plaza from the Hauptbahnhof past the city hall, which didn't exist any more at that time. I remember standing in front of the Hauptbahnhof and watching a train consisting of a four-wheeled motor pulling two trailers. The center car (first trailer) derailed on the special work. Evidently this was not an unusual event as the train stopped and with the conductor watching, the car went back onto the track, and away they went.

I also recall needing to use the toilet in the station. The ubiquitous old lady who overlooked the facility gave me eight pieces of newspaper torn to be the size and shape of john paper. Since I was part of occupying troops, it didn't cost me anything.

Next stop was Linz, Austria. We were put up in a high school at the end of a car line, and I recall watching them change ends. The cars were 30" gauge four-wheelers. There was a snag in the wire fixed so that the bow trolley collector caught in the snag when the car changed directions, the bow pushed the wire up, the car went under the stationary bow and voilà the car was set up to go the other direction.

Linz had this little cross from the main line and also a spur into the railway station, which was the end of some of the runs. The line ran from the south end of town, past the Hermann Göring steel works, which by now was "daylighted," through the downtown, and across the Danube to the car barn. At the south end the line connected with a 30" (750 mm) gauge line that ran to Markt-San Florian. The "interurban" connected at the end of a long steep hill, and the cars would strain and grind up to the top of the hill all the way in full series. This "interurban" has been partially replaced by extending the Linz streetcar lines to a new loop terminal where the big long multi-car articulateds turn now.

The interurban has been partially abandoned and partially occupied by a trolley museum at Markt-San Florian. They have a large group of cars, but the real jewels are cars which must date to the 1800s. I was favored by a trip on one of these in the 1980s.

The north end of the Linz lines went across the before-mentioned bridge into the Russian-occupied area of Austria where the car barn was and a connection with the Postlingbergbahn, which was a different company, at some point. This line had five cars all numbered in Roman numerals, no air, but with rail friction braking and no street running. They ran up a heavy grade to a church at the top. There was something unique to this line which made the switches very complicated. I remember on subsequent trips there that Bill Janssen was throwing the switches while I videoed all of the complex rail response.

I have never encountered anything like this little line. It is being modernized and well worth a trip to see it. This is at Urfahr, which I guess is or was a suburb of Linz. Also the streetcar company has laid a line all in private right-of-way joining the

mainline at the north end of the bridge and the articulateds run out there. Four-wheelers still run from the barn to the railroad station.

There was a standard gauge Interurban running from a sort of nondescript part of town and going out to Leonding which was Hitler's hometown at one point, and then on further through strawberry patches to a junction going to a little town and one branch running to an interchange with the Austrian rail system.

I never rode this line while I was stationed there. They had a little four-wheeled steeple cab pulling a really ancient double truck trailer. We would go by this thing on the way to town from the air base, and it was so ancient that it never turned me on as far as riding. They now have some nice second-hand cars from Frankfurt and it is a pleasant ride.

Salzburg was in the American Zone and had an interurban which ran rather infrequently and I understand has since been upgraded and extended. I rode the line but have no distinct memories about it. Salzburg was served by trolley buses and still is. Trolley buses were never very common in Europe. Vienna had trackless trolleys overhead but the Russians had appropriated all of the equipment.

While we are talking about Vienna, it was in the Russian Zone and strictly off limits for American GIs. There was one overnight train each way between Linz and Vienna and I used to think longingly that it would be a shame to be so close and not see it. Since I worked in headquarters and had to draw CQ duty once in a while in the first Sergeant's office and since all of the stamps were right there—what was I to do? Well, you ex-GIs guessed it, I made several trips to Vienna. In retrospect it probably wasn't such a good idea because if the Ruskies had decided that I looked like X material, nobody would have ever heard from me again, and they would not have known where to look.

The Lord was merciful to me and I was not captured. I also have all sorts of interesting memories from those trips, the little four-wheeled "L" cars, and a few non-trolley related memories.

There were some other operations, notably two interurbans end to end going from Wels to Gmunden on the Traunsee. These two interurbans were not even the same gauge. The equipment was so ancient that you nearly had to have a ladder to get on board, but that is what interesting memories are made of. These are S&H operations and still running, but with more modern second-hand cars.

Gmunden has a little one-line trolley going from the railroad station to the lake. There was a passing track in the middle, and I have seen as many as three cars by the hotel at the lake's end. The girls were even more interesting than the trolleys, which I didn't ride until they had semistreamlined cars, years later. I saw one of these cars in Japan in 2003. They were meter gauge and had doors on only one side

because the other side ran against the cliff most of the way. I still don't understand how such an improbable operation could rate new cars.

There was another meter gauge operation running from a connection with the big railroad at Mondsee to the sea of its name. This line was surely one-of-a-kind, and bucolic doesn't even describe it.

I always wondered about it, because I never saw any cars from the main line railroad to Salzburg. Years later it occurred to me that the reason I never saw any cars was because I rode the troop trains, Salzburg to Linz, and there was no reason for a car to meet a troop train roaring through.

This line was still running in the 1980s and was the most wonderful toy anyone ever imagined. The line was well built with steel trolley supports, and it avoided changes of grade in the mountainous territory by going out around every little hummock. Since the line ran very slowly it was a photographers dream and the kind of model prototype grown men dream of.

Since there are basically only four other lines in Austria, I will cover them here, although they do not fit into this time slot. The blue line out of Vienna to Baden deserves special mention. It gets into downtown Vienna through the full length of the "subway" which is basically a trolley subway. The cars are nice and give the illusion that they are going like crazy, which I think is not the case. The line is nearly all double track and goes through urban territory for its length. Baden is one of the most appealing little communities that you will find in the whole world, just a jewel!

The car barn is about where you would imagine the Vienna city limits to be, and there are some old cars in storage. I can't imagine riding all that distance in those cars at the speed that you would expect. The present cars fit the line in every respect.

In southeast Austria we find Graz. They have a little of everything in Graz as far as trolley equipment. One of the interesting things is a piece of track at the carbarn which makes a sharp curve into a large mirror on the side of the barn. Depending on where you stand, you can get all sorts of crazy illusions. They have a long suburban line which ends up at a carbarn. I couldn't make out whether the line went on at one time or not, but this is an interesting ride with many turnouts and it wanders about some.

Perhaps the gem among gems is Innsbruck. It is famed for the Mother Duck and the Ducklings. Unfortunately this is abandoned but it was a long line in a highway that featured little red four-wheeled cars, pulling even more diminutive four-wheeled trailers. They also have the number 6 line that goes up a continuous grade through woods to a suburb; I think it is called Igls. The outbound trip is colorful and interesting, but the inbound trip is memorable. They release the brakes and just fly into town. When I was there shortly after the war they had all of these mother ducks

and ducklings and one really modern car. The story about that was that it was built in Italy during the war and shipped to someplace in Germany. Innsbruck is at the north end of the Brenner Pass, and when the car arrived on its flat car in the rail yards there, they just appropriated it.

Innsbruck has a bunch of second-hand—articulated monomotor cars. Since one motor pulls at least four axles, the wheels need to be almost perfectly the same size and this is tough to maintain. It was a great idea, but it didn't work very well.

I have also ridden the line at St. Polten, but alas, it is no more. It was a long private right-of-way suburban operation. The talk was that the railfans from Vienna would take it over, but I do not know about this. We saw a four-wheeled steeple cab delivering a mainline truck trailer on a rollschemel over the street car line. This would be roughly the equivalent of delivering a truck trailer on a flat car to an industry served by a trolley line.

Also at St. Polten, there are a group of meter gauge lines into the mountains. We rode the one to Mariazell. It is a long trip up there, and we had a regular train pulled by an exact copy of an electric mainline passenger motor but scaled down to perfection.

We had quite a bit of freedom to move about as long as you showed up at the air base to do your job. This meant that if you could take the train or hitchhike and be back on Monday morning you were free to go.

Munich was well within this radius, and I spent quite a bit of time there. The street railways in the USA were usually laid out with one hub which was downtown. The European lines had several or even multiple hubs depending on the size of the city. Munich was a graphic example of this because their transfers were a complete city map, and you could easily see where all of the hubs were. There has been a lot of abandonments and reshuffling of the lines since the war, and I don't think this still is the case. Also, Munich was the only trolley pole operation that I can think of. Most of the European operations were with bow trolleys. In early times there was some bow collection in the States, but it never caught on.

I am going to shift gears a bit here. I got a furlough to go to Switzerland, and I can remember clearly looking out of the upper story of a hotel in Bern and watching the streetcars go around a corner. Lo and behold, a wheel set swung out from the center of the car. I recall thinking what a dumb arrangement. How did they suspend the body, etc. and they were goofy looking.

I later read a book about the Eastern Massachusetts Street Railway and the three-axle cars, how the center wheels steered the main axles, and how they stayed on the track at curves so much better. As of the 1990s Munich had some modern three-axle Driaxen cars. I suppose that it allowed a longer wheel base on the car, thus a better ride. I don't recall riding one.

While we are in Switzerland, the itinerary that I chose included the most trolley cities that I could find. One of the side trips was a journey over to Neuchatel and a lengthy trolley ride along the lakefront. This is in extreme western Switzerland and out of the way, and it was probably about 2000 before I got back. The ride now is not nearly as long but at least some of the line is still there. In the barn were two historic cars and they were the kind on which I had ridden. I told the barn foreman about this, and he was really impressed to talk with someone who had actually ridden on them.

On a trip to Switzerland with Bill Janssen, he took me on a little line that ran from a lake up into the mountains. They had a modern looking car, nothing out of the ordinary, but when we got back down to the lake a diesel engine started and off went the car, out from under the wire, to do some switching. Quite a surprise. It was evidently a pancake engine under the car and not evident from inside.

One of the real treats was a ride through the mainline tunnel from Brig in Switzerland to Domodossolo, Italy, where we got onto an interurban, which ran to Locarno back in Switzerland. This line has been vastly upgraded over the years, but at the time we ran along briskly, with sheer drops to a river on one side and no guard rails in the trackage. The trolley wire was supported by poles from trunks of trees which were anything but straight. It was a real adventure! This line turns into a line in Switzerland with the initials FART emblazoned on the cars. These obviously are initials of something in German. Of course we did the loops in the Interlocken-Grindelwald area and rode up to the Jungfrauoch. I can't recall all of the railroad names, but we did everything thoroughly.

Back to the 1940s. My boss liked the way I drove a jeep, and although I never got a GI drivers license, we made various jeep trips. One of these was a trip to Nürnberg. We stayed overnight and he wanted to go to the officers club, so I was left with a jeep and a return time. Nürnberg was really plastered by the bombers and not much was left of the town center. The streetcar tracks were back in place by then and went here and there through bombed-out areas. I had determined that the jeep track gauge was the same as the car lines, so I was driving around downtown on the trolley tracks with no street surface in case I slipped off. The Lord was very patient with me and preserved me for the most part in my adventures.

On one of my GI time journeys I got as far west as Heidelberg. This was an attractive university town and undamaged by the war. It was connected with Mannheim by two interurban routes. The cars operated between the two cities in a continuous loop. I happened to go to Manheim on the west leg of the loop and the damage to the city was breathtaking. The tallest thing on the horizon was a three story steel building frame, standing starkly against the skyline. The car storage must have been out of town as they seemed to have plenty of nice center entrance double truck multiple unit cars.

This west line has now become part of the Manheim S Bahn, and the east leg is now a meter gauge interurban. A real interesting pleasant lengthy ride. Manheim does not as of 2005 show any scars of the war and is a bustling city with plenty of interesting car lines. It is intertwined in some way with the city system at Ludwigshafen, which is across the Rhine River to the west. There are two bridges with tracks connecting the two, and to the west of Ludwigshafen is a line named RHB which goes an hour or so west to a medium sized town. Twenty minutes headway during the week. The heft and quality of the track work in Europe for the most part is unbelievable.

From here I will not try to separate the timing of trips as there have been many. I was in Berlin twice before the wall came down in 1988. As we rode in tour buses around East Berlin, it was as though we were on a movie set. The streets were absolutely deserted, no one anywhere and virtually no automotive traffic, also virtually no trolley movement. It was positively eerie.

There were no trolleys left in West Berlin because the politics of the division of the city didn't leave lines running anywhere sensible, but there were lots of people. Since the demise of the wall you have access to the excellent light rail and trolley lines in what was East Berlin.

The East Germans were very much pro-rail. Berlin for some reason seems to have had two almost separate streetcar systems connected by a single artery. Off of the southeastern system there was some industrial trackage. I found that I could walk to the carbarn and found at least four nice new steeple cabs built in Romania within the past ten years. There were lots of tracks going to piers and factories, but I was told that there was no rail service currently.

To the east of Berlin are three short trolley operations which are not connected to the regular trolley system. The south one, to Schoneiche, is meter gauge and connects to the Berlin "L" and is the biggest. When I was first there it was pretty broken down. There was talk about whether to abandon it. It has been rebuilt and is now a first-class operation. The middle one is standard gauge as is Berlin, goes to Woltersdorf and has some freight switching on the east end. The north one is also standard gauge, goes to Strausberg and has interesting little doodles in the track here and there. Met a trolley fan from England at their barn.

The southern segment of the Berlin system runs some double truck cars which are relatively quiet. They have trucks with inserts like PCC wheels, but are wood. I couldn't find out anything about them.

The northern segment runs to an apartment city on the east side, and the track is nearly all center street. The running time to West Berlin is one hour, and the cars are new and just fly down this private right-of-way. This is light rail at its best.

If you get to Germany, do not miss Halle. It has almost everything that is good. I went to the huge central carbarn to see what I could find out. They gave me tea and

a conference room, and I thought they had abandoned me. I was on my way out to the car stop and a guy came running to me. He took me by automobile to a small barn which they have given over to trolley fans, and they are working on restoring old cars there. They have a segment of street to run on, power and everything.

Halle also has what is billed as the longest streetcar line in Germany. It was double track and the track was horrible. Several years ago I went there and the track was being upgraded. I rode cars rebuilt in Berlin, assuming the track had ruined the cars previously on line and they had to get them rebuilt.

Now I am going to just list towns. I have been to Plauen which has a lovely walking street with trolleys, Zwicka and Chemnitz. This city was evidently almost obliterated by the fighting and has a lovely park in the center with modern concrete buildings around. The city has an occasional old building which were the exception to survive the war, and you wonder how it is that these buildings are standing in what was obviously a field of destruction.

Naumburg had a one-way loop of trolleys from the railroad station to downtown. I understand part of this is still running. Dresden has lots of trolleys but be sure you have a place to sleep if you go there. I think that modern, 2009 Germany has 52 towns with trolleys; I have ridden 53 there. If I go on and on I'll bore you to death.

Try not to miss Braunschweig, Dusseldorf and Karlsruhe. There is a dandy steam narrowgauge connecting Nordhausen and Halberstadt, with trolleys on both ends. Bad Schandau near Dresden is an "ought to" covered later.

Go across the border to the Czech Republic. Original Czechoslovakia has eight trolley operations, each one better than the last. Go from Bad Shandow to Teplice and don't believe people who tell you there is no interurban there. It is very much running to Most.

By the time that I got to East Germany in depth they mostly had new Tatra cars, though some of the smaller cities still were running "Kriegswagens" (war time cars) or war time rubber stamp cars. A lot of these were built by a defunct car builder in Gotha. Gotha didn't have a real extensive system but a huge carbarn. I was never able to determine whether this carbarn was the home of the Gotha brand of cars. These cars had several distinguishing features that made them stand out. First of all, they were all four-wheelers and the company probably survived as long as it did because the cars were cheap, but of an acceptable quality. They had developed a lowered floor height by letting the wheels rise above the interior floor height, covered by a shroud maybe 5-6" high to close the area around the wheel under the seats. This meant that the axle height was higher than the exterior sheathing. This was taken care of by having a half-moon in the car side at the axle, I suppose so that they could lubricate the axle bearings. These cars were in production even after the PCCs had stopped being made in the States.

Actually, though they were four-wheelers and retained all of the shortcomings of the four-wheel design, some of them were remarkably advanced technologically.

It was hard to tell whether some of these designs were built that way or were the result of various operators upgrading the cars. There were some cities that had these cars with a three-axle, two-cabin articulated body. This eliminated the nosing typical of four-wheeled equipment, and these cars were real hot rods, though still without air brakes. Europe is strong on dynamic braking and the final braking is then by the old wind up handle.

Wuppertal—and probably others—had left the front car axles unchanged, but had opened up the front and rear of the two cars and just removed the front axle of the rear car, making a two-wheeled trailer, with an articulation to the front car. I am sure that these were homemade rebuilds and were a pretty satisfactory vehicle. These also rode well. Really the only thing old fashioned about them was the exterior body styling. A third permutation was to put a swiveling truck on the front car and balancing it so that a single axle would carry the trailer, or rear section of the articulated unit.

I never heard of anyone stateside making an articulated car out of two Birneys, though a lot of four-wheeled cars had their bodies joined and double trucks installed.

Well, getting back to Gotha, the line past the carbarn went on a little ways and then joined at a loop with a long, long meter gauge suburban line that wandered through people's chicken yards, had slight curves to miss the front stoops on some houses and just did everything picturesque that you could think of. I don't recall that these suburban cars ran down to the railroad station. This line was definitely a one-of-a-kind.

Leipzig and Dresden were big cities, which had multiple, long lines and interesting equipment. Leipzig has quite a section of four-track running near the railroad station which makes for a photogenic location.

If you go to Dresden, there are (were) two steam-powered meter gauge passenger-carrying suburban lines that you should ride. One of these crosses a streetcar line. Also, if you go to Dresden be sure of a place to sleep. The communist way of life did not allow for much traveling so there are (were) practically no hotels and people did not eat out recreationally. If you went by a restaurant in the era of just after the wall came down, you had to get off the car quickly and go eat because you might ride half of a day and never go by another place to eat.

I absolutely could not find a place to sleep in Leipzig, so took the train on to a resort town, Bad Schandau. There were multiple hotels there and after I got organized, I went looking for the trolley. I got there after the line had shut down for the day, so I decided to walk up the line to look for the barn.

About two miles up hill, I came to a four-track stone building which was the carbarn. There was only a watchman on duty but he welcomed me and showed me around the building. He showed me a wheel lathe where they recut the treads after the flanges had worn down to what we would have referred to as a "sharp flange." The meter gauge track followed a very winding road up the mountain from the town at river level, up to the top of the mountain. The wheelsets that they got had very thick treads, and they would get three regrinds out of the treads before they had to discard the wheel/axle set.

This lathe was obviously really old, and in the course of showing me around, we went into the barn foreman's dingy office. I almost dropped my teeth at what I saw there. There on the wall was a current Illinois Railway Museum calendar.

This turned out to be one of the better things that could have happened to me. Let me set a scene for you. Nearly all of the trolley barns in Europe have a single track joining the barn with the street trackage. This track goes past a building always occupied by a fire-breathing old woman who checked the cars in and out, and also the wandering railfans. Without her blessing the Pope himself could not enter.

I had access to all of the Illinois Railway Museum publications, because I worked there, so I would load up with calendars and the other color brochures as bait, and when I found a barn, I would go hat-in-hand and show them to her making sure to point out the equipment that I ran and that this was a present from America to her personally.

When we would get through with this presentation I owned the barn, lock stock and barrel. I used to travel to Europe with Bill Janssen. We made good traveling companions because he would get me up before daybreak, we would gobble breakfast and never stop riding until it was dark. If we went by a street vendor we would buy a wurst; if we didn't, we went hungry. Also we were the only two equally cheapskates God ever created. I learned the ropes from Janssen. "He who travels lightest, travels fastest." It was a standing joke—but almost true—that he would carry a supply of film for his camera, his passport and one extra sock, so we did not waste much hotel time.

I traveled deluxe; I took an extra set of underwear. I would try to stay awake long enough in the evening to wash out my underwear and socks and put on the standby set to sleep in. In the morning the washed out stuff was seldom dry, but you put it on and your body heat took care of the rest of the drying.

I carried my video camera and supplies in a backpack. If it worked out that way we'd go by the Hauptbahnhof and I'd check the bag. Otherwise, I had to lug it all day long. One of the other things that I carried was a good supply of Illinois Railway Museum propaganda for the ladies at the trolley barns. It was a real pain to carry the calendars, because they were cardboard and I did not want to bend them. Since Janssen didn't have hardly anything to carry I would suggest now and then that he

help carry our "barn passes," but he never saw it that way. I would remind him that it was my tickets that were the access to the barns but it never worked.

Especially in Poland, you almost were expected to put your head down between your legs when you went by a carbarn. I doubt even military installations were so zealously guarded. Heaven help you if someone saw you taking a picture through the fence. There was a huge barn in Krakow, Poland. The trolley went by two sides of this and it had all sorts of one-of-a-kind equipment, old trolleys etc., and was very large.

I was loaded for bear when I went out there—this was on a subsequent trip—I had multiple copies of everything. As I expected, I had a heck of a time with the woman guard, and that was only the start. I found myself directed into a large office building and down a long hall into the office of one of the wheels. He was not adverse to accepting my "souvenirs" and he personally took me around the big complex, anywhere I wanted to go. He was Polish and didn't speak English, so we communicated more-or-less in German. The big deal was my entry system, Illinois Railway Museum calendars.

Speaking of Krakow, Krakow and Katowice were something else. I had been warned not to schedule less than three days to ride each place, and this was good advice. These two cities were kind of a hub for regional trolley networks. The Poles are not noted for being bashful about how they run their trolleys, and talk about fast rides. Both networks had a lot of rural running. You would go and go and go and then there would be a junction out in the country. Nothing in sight except cows or mules, but a trolley junction. Incredible! It took me a long time to make any sense out of the track layout in both of these places. Grand unions are not very common. Krakow had one in a kind of downtown area and then lo and behold, way out in the country is another—and they were used!

Speaking of Krakow, I have videos to prove that I was not having bad dreams, but the gauge of the track evidently was narrow on some curves. The flanges had worn alternate paths on the ball of the rails to the point where the ball was grooved deeply out, in by the center of the rail.

The Poles had bought three new cars from Tatra in Prague, took them apart and copied them. Thus the general design of the cars was good but the doors never fit. They must have been horrible in the winter; the wind just blew in with a gale. The newest ones in Warsaw were sliding. There was something about the design of the trucks that leaked grease in two streams. Wherever the tracks were not in the street so that traffic carried away the drippings, there were two large ridges of grease down the center of the tracks. I would have thought it would be cheaper to fix the leaks rather than refilling the gear boxes all the time and replacing the boxes when they didn't refill them often enough.

This would be a good place to digress a bit. I was fortunate in getting track maps for most of the places in Germany and this was invaluable in sorting out my riding. These maps are available with some effort, and they make your riding much more productive.

Let's stay in Poland for a while. There are twelve streetcar cities in Poland. Some are sort of small, but the little town riding is sometimes the most productive. When I was in riding in Grudziadz, this couple got on at the end of a line. He had on a Tyrolean hat with a jaunty feather, and she had on peasant attire with a little wood purse. As soon as the car started he headed for me—he was a ticket checker. I almost laughed in his face because I did have a ticket, and I disappointed him by not making an obvious bust of a %#@& foreigner. I rode all of the lines there, and I ran into them repeatedly. It got to be a joke, because I'd hold up my tages karte (day ticket) and wave it at him, and laugh.

I knew about the larger cities, but there are some smaller places that have trolleys that one should not miss. Gdynia in the old "Polish corridor" is all Trolley bus, one of the only places in Poland to have trackless trolleys. Neighboring Gdansk has great trolleys. Going from west to east, Szczecin, Poznan, Bydgoszcz (when you go here, there is an extensive two-foot gauge steam-diesel network out of a neighboring city), Grudziadz, Warszawa, Lodz Wroclaw, Czestochowa, Krakow, Katowice, and the only one I did not ride which is near the Czech border.

No one loves a dumb Polish joke better than I do, but you cannot help being amazed at the way they have recovered from the raping that was performed on that country. I have been there four times. The last time I specialized on the narrow gauge railroads. I'm afraid that there isn't much left now. There were great networks of various narrow gauges, but seldom did they serve an industry or a quarry. It seemed that they must have been built to haul sugar beets and people. They were the equivalent of the electric interurbans in the USA. Now that they have buses and black-top roads, there is not much need for them anymore.

I mentioned that the former Czech Republic had nine electric trolley operations. Prague, the capital, Pilsen, Bratislava, Slovakia, with a long trolley subway under the mountain that runs through town. Brno with a four-track section by the railroad station, and lines running through and under and around the mountains that constitute the town. Olomouc and Ostrava, Kosice with the steel mill which had one minute headways at rush hours and a huge trolley terminal. Trencin was one end of a 30" gauge interurban. The standard gauge interurban from Liberec to Most, and the grand daddy of all, the standard gauge interurban in the Tatra mountains from Poprad, Slovakia, with a cog railway at the other end getting it down from a mountain resort area to the main line railroad.

I went alone to Europe to see the Berlin Wall just after it was torn down, and on to Prague, where I thought maybe I could get into the Tatra car plant. I took the streetcar out to where it should be, but I couldn't find hide nor hair of it. I got on the

phone and called a travel agency, explaining what I wanted to do. Yes, they could arrange a guided tour. Well, the factory was there alright, but it was the darndest conglomeration of sheds and shacks you could imagine, and it did not show at all from the street. Actually, it was quite a big place—they were turning out three cars per day, but by our standards it was a collection of shacks.

I did an extensive video of the factory, and I am totally convinced that I was the first person to ever show up with a video camera. I since have videoed the car factory in St. Petersburg, so I have a bunch of car plant videos that I put onto a DVD. The lady interpreter from the travel agency took me aside before we went in and said, "I need to warn you that this will be rather expensive, because you also have to cover our plant guides' wages." I asked, "Well, how much per hour?" When she told me I about dropped my teeth, it came to less than I had to pay minimum wage help in the States. I didn't make any fuss about it, that is for sure. At that point you could hardly get rid of \$10.00 in a whole day. Sandwiches were \$.25 each and other stuff correspondingly cheap. In Poland a ginger ale was \$.02.

To go on about the Tatra plant, there were endless strings of assembled, meter gauge PCC trucks. They were for an order going to Riga in Latvia. When I went there on a CERA trip in about 2002, I got to ride these cars that I had seen under construction and also video the adding of a frame lengthening that the streetcar company was doing in-house.

Janssen and I went through the Czech Republic and into Hungary. Budapest has a nice system. They have an early subway line with very small cars. There is a first-class railway museum at the edge of Budapest with some of the original subway cars where the motorman sat scrunched up over the truck, and the people rode in a sow belly between the trucks. In Buda, which is the western part of Budapest, you take a streetcar to a cog railway to a "pioneer" railway. The commies decided that the youth needed a way to learn about railroading, so they built a quite long narrow gauge steam—later diesel—railroad in a very rugged part of the mountainside. It has long rock walls holding up the track and/or the mountainside, well laid and heavily ballasted track. All of the trains and station work is done by 10-13 year-old kids. An adult runs the engine. Now it has become a tourist attraction, but the kids still do the chores.

From Budapest we went east to Szeged where they had streetcars.

It was very pronounced how much more difficult it became to travel as we went east. Germany was easy. In the Czech Republic there was not much signage and the trains were shabby; in Hungary, more so. When you got into Romania it was all uphill. We rode out to the car barn in Szeged. There we were well received and when we left, they trotted out a training car and insisted that we run it downtown.

Next we went to Arad in Romania, where we found a large meter gauge layout with lines and lines of cars at the barns being used to cannibalize for parts. Arad has a

former meter gauge railroad that has been electrified and cut back to serve a large refinery.

From here we went south to Timisoara, then north quite a ways to Oradea. This is a one-line town with modern Tatra cars which they claim were given to them. If you will pardon me, I will doubt this.

Then we went back into Hungary to another one-line town, Debrecen. This line was on private right-of-way and served by articulated two-unit older cars. They also had one modern low floor car. I have since seen pictures of this with more of the low floor cars.

To back track many years, Janssen and I went to Spain and rode on the four-wheel open cars on one remaining line in Barcelona, then went on to Madrid. I have been to Madrid since and they now have a really first class city rapid transit. At the point when we were first there, it was an incredible junk heap. The cars were made in Germany in 1926 when the body technology was pretty good, but these cars were just wooden chicken coops on wheels complete with chicken house windows and all.

We went on from there, past the women doing their laundry in the river and hanging the clothes on bushes to dry, to Lisbon in Portugal. At this point the trolley system was intact and served by LITTLE four-wheelers with two-man crews. Lisbon still has most of their impossible track configurations in narrow streets, but the big part of the lines has been abandoned. They now have articulateds which serve the line past the carbarn. This carbarn is of note. It is very large and contains a trolley museum which is reached by an intra-plant trolley system that is as complex as the street trackage was.

I sat in Lisbon and watched while a motorman, who had stopped the car exactly under an insulator in the overhead, was struggling to shake it onto a live section. It took him quite a while, but persistence paid off. I had this happen in Portland, Oregon too. In Portland the motorman just put up the other pole and moved the car. In Lisbon it was not so easy with pantographs.

Our original trip consisted of going north to Coimbra, then to Porto with all of the American style four-wheelers. Fortunately some of these have been reimported to museums in the States. During my last time in Lisbon, I went on the electric suburban train to Sintra where you take a bus, or if you know the way you can walk, to a resurrected meter gauge line which is an absolute MUST. I shot so much footage around the barn that I did not have much left to record all of the incredible things the line does.

On a subsequent trip, I visited Bilbao which has, in addition to the electric suburban meter gauge lines, a neat new light rail line. One then takes a long meter gauge interurban along the coast to Hendaye in France.

On my last and no doubt final trip to the continent, I went to Bordeaux. This is the city with sections of the light rail where, due to political reasons not allowing overhead trolleys, they had to invent a 3rd rail sort of like the plow system in DC and New York, except that there is no physical contact between the car and the 3rd rail. I have heard it explained, but I don't understand how the cars are fuelled by induction with such a large air gap.

The line to the railroad station is the "Birney" line of the system with trains consisting of only five cars. The balance of the lines are served by seven car trains. I understand that the French had a hard time making this system work reliably. The rail line and trolley line trackage in France is excellent beyond our dreams. Laying track is one of the two things that the French really excel at.

From Bordeaux I went by RDC north to Nantes, where they have two lines that cross each other downtown and people just ride these trains in clouds. I think my next stop was Tours, which has a nice one line light rail. Then I went to Orleans and through Paris as fast as possible to the west coast again at Caen to a good two-line light rail with tunneling at the top end. I missed LeMans, because evidently there is a mountain range between the two cities and the train and bus service is almost non-existent.

I opted to go to Lille with mixed results. The first thing I saw in the railroad station were Gendarmes dragging an obviously Muslim guy across the floor. The cops were actively questioning anyone who even looked middle-eastern. I think that they have the right idea to deal with terrorism before it starts.

Lille has little, tiny rapid transit cars, which run in trains, but the cars are tiny beyond belief. You can easily reach across them, and I suppose the tunneling was cheap. They had two lines with these, and although I was sure there was a surface light rail, I could not find it. Turns out it was buried deep under the railroad station. There sure wasn't any space for it on the little, narrow streets downtown.

From here I went to Oostende, where the track wasn't up to French standards, but there was quite a bit of it, Ghent, Brussels, Antwerp, and of course Charleroi. Janssen and I had ridden all of the post-war narrow gauge trolleys around there, and I have quite a bit of video of this interesting network. The system has been rebuilt to standard gauge, changed in Charleroi and made into a very expensive high speed transit operation, but not much of the color remains.

I got off the train under Charleroi and asked at the information desk about getting to the trolleys, Strassenbahn etc. The young clerk said, "There are no trolleys here." I argued with him, so he called an older guy who verified that there were no trolleys here. I thought, "Well, I am here, let's go upstairs to the street and have a look around." The very first thing that I saw when I got to the stairtop was trolley wire, under which sat trolleys—amazing!

I actually went back later to take these two employees out and push them under a moving streetcar, but their shifts were over and they probably went home—via trolley.

The two terminals in Charleroi and all of the grandiose trackage and fancy stations seem like overkill, but it is impressive and photogenic.

From Belgium I went to Duisburg and spent several days covering the trolley spaghetti around there. This is a worthwhile use of time in Germany.

Now to try to fill in some of the cracks. My wife and I went on a Balkans tour, and I was able to cover Zagreb, Belgrade, Sofia, Bucharest, and Ploiesti. I had been to Athens before, but this time I took the subway clear to the south end. As we passed through Piraeus we went by a carbarn. In the barn were some really ancient open four-wheelers. I remember thinking "Hey, that is really neat. They have some museum cars stored here." If I had only known, they were really city streetcars. I had been told that there were no streetcars in Athens, and I never dreamed that there might be some in a little town nearby.

I don't think that I mentioned going to England with Bill Janssen and Bill Robertson, where we rode the lines in Blackpool. On the way we stayed several days on the Isle of Man and covered all of those incredible narrow gauge interurbans. We also went to Crich and covered that neat trolley museum. The cars there were all restored to perfection.

Afterthoughts:

On a trip to cover lines that I had not ridden, I went to Munich by flying machine and went west from there. One of the light rail deals was in Saarbrücken, a relatively small operation with expansion going on west of the present end of the line. Next was Strasbourg with crush crowds and another line under construction. Really nice cars.

Next stop was St. Etienne where the Olympics had been. This was an existing trolley that had perhaps been resurrected and added onto and was a very pleasant ride.

I need to check my video collection, but I think that I stopped at Grenoble, where they had a really first class street operation, beautifully done and obviously added onto.

My final stop in France was at Marseille where you took the subway to the beginning of this street operation. It was obviously something left over from the streetcars, but running nonetheless.

On this trip I took a deep breath and went out to the Isle of Mallorca. This is definitely a one-of-a-kind operation. You get onto a well-maintained but obviously antique train, jammed to the gills with tourists, and ride through the mountains to the south end of the island. There, you find a four-wheeled streetcar pulling two open trailers. The control situation of the trolley has obviously been upgraded, but nonetheless, it is a vintage trolley. It takes off through a crowded plaza from the car barn and train terminal and runs through fruit groves and alleys to a seaside resort, probably five miles distance. At this point the trolleys go down the street and park. The whole thing is totally photogenic.

Can you top this, in terms for your travel?