



ELECTRIC RAILROADERS' ASSOCIATION, INC.

Grand Central Terminal

89 East 42nd Street/New York, N. Y. 10017/212-986-4482

Fall 1985

Fellow Members of The E.R.A.,

On the last Saturday of September, I ran into Sam Kurtz at New Jersey Transit's annual "Fest" in the Hoboken Terminal. Sam is an E.R.A. member from over Philadelphia way. He suggested I write to you again because he likes these letters. I said I was too rough on NY's TA. Sam said you couldn't be too rough on the TA; he visits NY regularly and should know.

So I will start with this NEW YORK howler:--early in October, the TA went into the papers to tell the world it was abandoning its closed circuit TV surveillance at the Times Square and Columbus Circle stations. There have been 135 cameras at TS and 76 at Columbus Circle. The TA said monitoring the things took too much man power and that they were not effective in reducing crime. The criminals, presumably regulars at those stations, they say, know where the cameras are and commit their crimes off-camera. Too, cameras couldn't cover the stairways because these are poorly lit! There are no lighting experts in this part of the country, you see, who know how to light stairways. So, be warned. Keep away from stairways at Times Square station which is a ZOO and a sort of national cesspool or maybe just a sack of poisonous snakes.

Frankly, it does take too many people to watch that many monitors at one time. But the TA's way of going public on this was egregiously inept. I told Fred Schneider about it and he said the atmosphere of not being on top of things was everywhere in public transit. Pity.

Members who finished high school before 1950 will recall that our strong patriotism of that time included a belief that Americans could do just about anything and do it better than others. They will wonder what has gone wrong that you do not read of Americans getting contracts to design subways in other countries nor to advise on how to upgrade or build rail lines. At the moment, Japanese specialists are electrifying part of ARGENTINA's General Roca Ry. and supplying 52 three-car sets of EMU's to operate the service from Plaza Constitucion terminal in Buenos Aires. Harder to take is the news that Russian engineers are down there advising on converting the General Mitre 3d rail DC to high voltage overhead and on possible electrification of other lines. I haven't a clue as to whether Americans even bid on any of these jobs but I know that American banks hold a lot of IOU's from the Argentine.

Although South Africa seems about to be the center of a whirlwind, its railway system ordered 96 EMU's for 1987 delivery. They will be assembled in four-car units.---SNCB (Belgian National Rys.) will buy a large number of EMU's to modernize its local trains. Delivery 1986-88.---Italian State Rys. has received the first of its new B-B-B 3000 VDC locos from Ansaldo. There will be 72 in the lot.---SEATTLE is talking light rail. About 60 miles of it to serve the city and the Seatac Airport.

A NON-PROFIT EDUCATIONAL ORGANIZATION FOUNDED IN 1934

DEVOTED TO THE HISTORY AND DEVELOPMENT OF ALL TYPES OF ELECTRIC RAILWAYS

PUBLISHERS OF HEADLIGHTS, THE MAGAZINE OF ELECTRIC RAILWAYS

Ltr to Members---Fall/85---Pg. 2

NEW YORK---During the past summer, transit was in the papers from time to time. The attention wasn't very favorable to the TA but the picture wasn't complete, either. Press coverage of local affairs tends to be slap-dash, anyway.

Towards the end of July, the press told a drowsy city that the famous billion-dollar tunnel to Nowhere, the 63d St. Tunnel, was flooded (true), that it was defective (questionable) and might never be suitable for use (very questionable). The noise was great enough that the folks in Washington cut off expected federal tax dollars at the spigot. So much we know from the papers.

Tunnels under rivers usually have some seepage. That's expected and the engineers plan for it by providing pumps to suck up the water. No problem. Several weeks before the flooding was announced, various people walked through the tunnel. They didn't get their feet wet. Puzzle: who turned off the pumps? Why? No hint in the press..

The structural integrity of the tunnel was questioned because of omitted tests of the concrete used. No explanation in the papers.

About the same time, the TA's Chief Engineer left. No stated linkage with the tunnel problems; just silence from on high.

From here out, it is guesswork. My guesses: the tunnel will turn out to be safe or be made so; the papers never will tell why the pumps were off; the management would prefer not to have to use the tunnel since it goes no place and will raise both operating costs and deficits in a noticeable way.

Only passing references were made to another unhappy subway project, the Archer Avenue subway in Jamaica. Its another loser but not in a class with that billion-dollar boondoggle at 63d St. It, too, got flooded somewhere along the way.

Local members will remember that in the reign of Mayor Abe Beame (just before Ed Koch) the TA was persuaded that it should close that part of the Jamaica "L" (also called the Broadway-Brooklyn line) from Queens Blivet Sta. to the end of the structure at 168th St. & Jamaica Ave. That mayor's friends were convinced that removal of this bit of "L" would resuscitate Jamaica Ave. as a shopping center, maybe even result in moving Rockefeller Center from Manhattan to the shabbiness that is Jamaica. In fact, the "L" is gone and it's much easier to see what a dingy, depressed thing Jamaica Ave. is.

The Archer Ave. subway is intended to be a substitute for the lost "L"--sort of. It's a hundred yards or so south of Jamaica Ave. and won't get out as far. Like 63d St., it's a double-decker. Two tracks for use as mentioned and two others that would lead off from the Queens Blivet line near Van Wyck Blivet station, run south a few blocks to Archer Ave. and enter the same subway as the Jamaica line but on a different level. There will be no track connection between the two levels.

Archer Ave. is immediately north of the embankment which carries the LIRR main line. In Beame's day, there was a deluxe plan to have the Archer Ave. bit dive under the LIRR, serve another municipally run college (we have scads of these) and run to southeastern Queens on a non-essential LIRR branch. All of which might have made sense---maybe---except that the demographics are all skewed (screwed up, if you will) and it ain't about to happen.

Anyway, there was a flood. Rain, I hear. Not surprising when I realize I haven't seen a City crew cleaning a street catch basin since LaGuardia's time. Water has to go somewhere and it never goes up. The subway was handy.

Again, no pumps working. Why?

Is there truth in reports of signal equipment being soaked in muddy water and made inoperative before ever being used?

More recently, the Jamaica "L" was cut back another station to allow construction of the ramp needed to connect the remainder of the "L" and the new subway. This should take about a year although when Boston's "T" relocated part of its Orange Line a track connection was made in hours. New York isn't like other places, though.

Then there is the matter of the R-62A cars. Do not confuse with the R-62 cars built by Kawasaki. The R-62A contract, a bigger one, is with Bombardier. I hear nice things about the Kawasaki cars but the TA is threatening to cancel the Bombardier contract since the 62A's are troublesome.

None of the car problems can be charged to the current management nor can any possible design flaws in tunnels.

NEW JERSEY TRANSIT has overhauled the Newark City Subway. Everything--cars, tracks, stations--in beautiful condition. The subway celebrated its 50th birthday this year although I find it hard to accept that it's so long since I rode it on the opening day, May 26, 1935.

The Newark subway is the subject of a new book by E.R.A. member Joe Saitta. Called "Traction Extra #1", it's a most handsome 64-page pictorial on glazed paper. The front and back covers are in magnificent color and two dozen of the 155 photos in the book are in color, too. If you need line and track maps, chronology and statistics, they're there. Order from Traction Slides International, Box 123, Bank Plaza Station, Merrick, N.Y. 11566 for \$19.95 (New Yorkers add sales tax to keep the politicians in limousines.)

PITTSBURGH's downtown subway has been running since early summer and if it has encountered any real problems, we haven't heard of them this far east. Its full usefulness will not be reached until rebuilding of the Mt. Lebanon line is complete. That includes another subway, through Mt. Lebanon itself.

ARGENTINA---a group in Buenos Aires called "Asociacion Amigos del Tranvia" (Friends of the Tramway Assn.) issues a paper named "Boletin de la AAT", the 100th issue of which, for March/85, came to ERA HQ. It includes a listing of the street railway systems of Greater Buenos Aires and of La Plata as of 1914. Not normally of intense interest to you and me but worth noting for the number of different enterprises then operating. I've cribbed the listing for you---Anglo-Argentine Co., electric, 2732 cars running on 68 routes comprising 389 miles of line.---Lacroze Co., electric, 445 cars, 9 routes, 63 miles.---Port and City of Buenos Aires Co., electric, 67 cars, 2 lines, 26 miles.---Southern Electric Co., electric, 62 cars, 2 lines, 26 miles.---Southern Dock Co., electric, 7 cars, 3 miles.---Villa Dominico Co., animal power, 1 car, 1 1/2 mi.---Lanus-Avellaneda Co., animal power, 23 cars, 5 miles.---Villa Turdera, animal power, ???---Villa Albertina Co., electric, 12 cars, 7 miles.---East of Banfield Co., 2 cars.---Municipal a Sarandi Co., animal, 2 cars, 6/10 mi.---Villa Industrial a Lanus Co., animal, 1 mile.---Tramways of Ituzarzo, animal, 2 cars, 2 mi.---Buenos Aires & Quilmes Co., electric, 31 cars, 9 miles.---Electrics of La Plata Co, electric, 46 cars, 28 miles.---The National Co. (La Plata), electric 43 cars, 20 miles---La Plata Ry. Co., Steam power. The bulletin also carries detailed information on the planned new tram line that is to connect two subways.

REST in PEACE

Robert T. Van Buskirk, ERA #366, died in Sept. Joined ERA March 17, 1936.
Laurence H. Poinsette, ERA #3170, died Sept. 3d. Joined Jan. 13, 1965.
Wallace E. Wright, ERA #4884. Date of death unknown.

Their friends will miss them.

STORAGE BATTERY CARS---Last year I mentioned various roads that used them. I had very pleasant results in that a number of you wrote to give me more info. I have all of that material here and plan to get it into E.R.A.'s computer one of these days where it will stay for use of anyone interested. Now for some of the other odd street cars---did any road other than New York's Metropolitan St. Ry. use compressed air cars (in this country)? The MSR had a fleet of 20 that it used for a time on the 28th & 29th Sts. line until there was an explosion at the charging station. The company denied that there was a connection between withdrawal of the service the next day and the explosion! Of course, the Third Avenue system also had three of them but they didn't stick around too long as far as I know. Made a small splash in the papers when they went into service but no word on when they stopped running. And how about kinetic steam power, the stored steam or fireless cooker? The Babylon RR out on NY's Long Island had one but I know nothing beyond that bare fact. The NY Central, not exactly a car line, used one on its Putnam Division. And the Brooklyn Navy Yard had a loco with that power source. Too, the Manhattan El in NYC had a test involving a funny looking compressed air loco but I doubt it even belonged to the "L" company. Steam powered street car service was common although I'd divide the equipment into two types---the self-propelled steam cars as used in Brooklyn on the line to Fort Hamilton (upright boilers in those) and the steam dummies that hauled passenger trailers (Brooklyn had this sort, too.) Apparently, this was the variety used on NYC's Second Avenue RR about the time of the Civil War---but only north of 42d St. Send in your facts and leads; maybe we can build up a data file on the less common sort of street cars.

CHICAGO---Norm Carlson sent a clutch of clippings early this year. No longer the late news but I'll give you a condensed version anyway.---Federal investigators' verdict on South Shore wreck of last Jan. 21 was that the eastbound train entered the single track section without getting clearance from the dispatcher. The motorman admitted he had no "go ahead" but he decided he could make it. He couldn't and he didn't. He, the conductor and ticket collector were fired on Feb. 15.

CTA AND ITS TWO UNION LOCALS slugged it out and the Authority's punches were heavier. On Jan. 30 the unions voted down a proposed contract 2946 to 2722. On Feb. 19, CTA said it would lay off 22% of its help, abolish 29 bus lines, cut service on 28 others, close 24 "L" stations and run the rapid transit trains only between 5 a.m. and 8 p.m., Monday-Friday. On Feb. 23, union bosses agreed pretty much to what CTA wanted---no pay increase the first year and 4.6% the second. State legislation in 1983 strengthened CTA's position by forbidding automatic cost-of-living increases in CTA contracts and by approving use of part-time help. Also, the local fount of subsidies simply was not about to pay more.

NEW YORK (Still)---Back in the spring (May 27 & 28), The Times featured the TA's shortcomings in long articles that started on the front page. The focus was on management procedures with special attention to recommendations made four years ago by a team of the city's topmost business executives. The paper concludes that major inadequacies continue as before. Specifically, there are still shortages of parts that keep 100 cars a day off the road; over a third of calls to the TA's information number get no response; rejected parts are not sent back to vendors for credit; 75% of obsolete operating manuals have not been updated.

One little item tells you what sort of dunghap the town has become---every week, it costs \$65,000 to replace 1500 panes of glass in subway car windows. All knocked out by hoodlums. It takes 72,222 fares a week to cover it.

Note: on obsolete operating manuals or obsolete anything---signs at station entrances all over town tell you that you are entering a station of the Interborough Rapid Transit Co. of the Brooklyn-Manhattan Transit. Both of

them, of course, disappeared in June 1940, over 45 years ago. Aside from the glitter of mid-Manhattan, the whole city is obsolete or obsolescent. The pols can't make it work but they are great at making excuses and profound statements on things like foreign policy. Vandals go unpunished and the pols blame "society" but not the hoodlums.

NYCTA is revising its subway map, supposedly for fall release. It will appear when some route designations change. The routes which have been known by double letters are to be given single letter labels. Thus, "C" in place of "CC". Since there are now both an "A" and "AA", the latter will become "K". I wonder if another new map will be needed if, as and when "B" trains go through the 63d St. tunnel.

NEW YORK & MONEY:---the TA's controller announced in late June that the TA had lost at least \$80 million and perhaps over \$100 million by faulty accounting in the last few years. Because of inadequate paperwork, it could not claim reimbursement of expenses from national and state governments.

NEW YORK'S PUZZLE of The Spring Season---Why did New York's governor undercut his very own, personally chosen TA chairman? For the second time, this governor (Cuomo) pulled the rug out from under Chairman Kiley when the MTA-TA was in a very strong position vis-a-vis operating unions.

NYCTA's contracts with the TWU and Amalgamated were to expire at the end of March. TWU represents the bulk of TA's blue collar employees save those driving buses in Queens and Staten Island which have been Amalgamated territory from way back.

TWU's demands included a 20% pay increase for openers and the usual bag of preposterous stuff, like a holiday in memory of its founder. Management responded with offers of minimal increases. TWU asked for binding arbitration; management refused.

At the last hour, the governor had the legislature convene in an extraordinary and peculiar Sunday session on March 31 and give the union what it demanded--binding arbitration. You don't agree to arbitrate when you are in a powerful position.

The governor's office did not deny that he intervened as a favor to the TWU which had backed him for election (He won that election by 1/2% of the votes.) About the same thing happened months before when MTA's Metro North trainmen struck and were losing their strike. That this governor would want to help all unions at all times is expected but why make your own handpicked chairman look like a damned fool? The governor was quoted: "Did they have unions in Massachusetts? You can tell he (Kiley, who came from Mass.) didn't understand the union movement here."

In an April 3rd editorial, "False Transit Peace", The Times intoned, "Mr. Cuomo's capitulation is actually a further defeat for taxpayers and the riding public." Maybe The Times thinks there is supposed to be a relationship between wages and the value of work performed which would be a radical idea in this city.

MIAMI---a long spring story bemoaned traffic far below what planners anticipated. It suggested that the \$1 fare, coupled to parking fees of \$2 or \$3, discourages a switch from autos to trains. Unless traffic goes way up, there is little chance of federal money for the second line.

RUSSIA---Volgograd has something called a METRAM. Described as a new type of fast tramway, it is partly underground. First of two lines is about 6 mi. long.

PHILADELPHIA---The new rail service to the airport is operating, as you may know. I hear a) it carries more passengers than expected, b) it carries less. But it sure is a great convenience to plane passengers. The fares are high enough to discourage airport workers from using it.

POLAND---PKP, the Polish State Rys., finished an additional 300+ miles of electrification in 1984. 30% of the 16740 miles of route now juice-powered. About a thousand steam locos were still in use, plus plenty of diesels. Planned new electrification includes the 240-mile Russian gauge line from Katowice east to the Russian border, which line was built in 1979 to haul Polish steel to the east. The Polish standard gauge is the same as our own. There are a few narrow gauge lines scattered around the country.

MONTREAL plans a Metro Line 7. Rejecting a recommendation from MUCTC, operator of the Metro, the Quebec provincial government decided it will use steel wheels on steel rails. The province will pay and so had the right to decide. Line 7 will be about 7 1/2 miles long. From an outer terminal at Blvd. Langelier du Plessis in St. Leonard, it will run southeast under Blvd. Pie X to Pie X station on Line 1. Six to seven years estimated for completion.

MILAN---Last December (84), Milan put in service a prototype articulated car. 27 tons, about 69' long. General outline based on their 1929 Peter Witts that look so much like the old Philadelphia Rapid Transit cars.

METRO NORTH has 54 new M-4 MU cars on order for the New Haven line. Tokyu Car is the builder.

MARYLAND DOT ordered four AEM7 locos from EMD for Baltimore-Washington service.

NAGOYA, JAPAN has subways. Lines 1 to 4 are in operation. Now line 6 is being built. The first 4 1/2 miles will open in '88, the rest of the 9.8-mile line in '91. 3'6" gauge, 1500VDC overhead. Northern end of Line 3 extended 1 2/3 miles in Sept/84; another mile due in three years. As of now, over 37 miles running of a planned eight-line, 81-mile network. Lines 1, 2, 4 use 600VDC, third rail. Line 3 has 1500 VDC, overhead. 61 stations now. 523 cars run as 4- or 6-car trains. Best headway=2 minutes. Traffic pushing a million passengers daily. I suspect the 1500 V lines will have through running either with Japan National Rys. or the Nagoya Ry.

BUENOS AIRES---Last Jan. 22 (85), SUBTE (the B.A. subways) asked bids for 25 light rail cars. Here's why: BA has five subway lines (A through E), four radial and one crosstown. Line E is getting an extension of 1 2/3 miles from Jose M. Moreno (Joseph M. Brown!) station to Varela, at which point there should be an interchange with a 5 1/2-mile light rail line (E-2) to a spot called General Savio. Later there'd be an E-1 as well, a 3-mile light rail line from Varela to Villa Lugano. The management speculates on a car designed to run either on the light rail lines or in the Line E tunnels so through service downtown would be possible. An interesting idea but not new in BA. Years ago, the city had cars on one line which came up and ran on the street. As I recall photos, the cars had two end doors for street loading and a center door for high level platforms.

MANILA opened the first half of its elevated railway in Dec. 1984. The second half was to open this year. Initial service was with trains of two 98' cars on a five-minute headway.

FRANCE---The middle 2 1/2 miles of Marseilles' Metro Line 2 opened way back in March '84. Extensions on both ends should be running in '87. A considerable extension is proposed for the city's one trolley line.---If Toulouse does the expected and starts building a light rail line in '86, it should be running in '90, with a second line ready in '93 and a third later. Altogether 15 miles.

MISC. FOREIGN ITEMS---Months ago, Blackpool, England, called for bids for three new cars.---Rome wants 60 new street cars.---Netherlands Rys. to get 47 new 3-car MU sets.---RENFE (Spanish National) put money in budget for 50 mainline electric locos and Portuguese Rys. for nine.

SACRAMENTO makes excellent progress with its light rail construction. In a telephone call with member Jeff Moreau on 19 Oct., I learned that five of the Duwag cars are on the property, the shops are about finished and work almost done on the North rail line. San Jose, on the other hand, Jeff told me, shows no evidence of work other than relocating some utility stuff. The Sacramento cars resemble the Pittsburgh cars. Painted white with blue and gold trim. Sounds photogenic. What with that great California railroad museum and light rail, the Golden State Capital will be the place to visit.

MORE FOREIGN NOTES---Having electrified most important lines on the mainland, FS (Italian State Rys.) is now electrifying the network on the island of Sardinia. It also is building some new line on the north side of Rome that will complete a belt line around the city.---What do you do when your town has 12 million people and you expect that to double in 15 years? Jakarta, capital of Indonesia, has come up with the answer: you string overhead on your suburban rail lines. It already has three electric lines and is putting wire on three more. Because riding is expected to reach 150,000 a day, it needs 500 new electric cars. I mean 500 MORE than it has. Mainline electrification on Java began when Jakarta was capital of the Dutch East Indies and run from Amsterdam.---Kawasaki Heavy Industries has furnished 24 cars for the Porto Alegre (Brazil) surface metro line. The line belongs to RFFSA, the Brazilian national railway system. The same RFFSA ordered two electric rack locos from Mitsui for use on the Santos to Sao Paulo line. (Hard to believe that locos and trolleys once left the U.S. for foreign parts bearing the plates of such builders as Alco, Baldwin, Brill, Stephenson, etc.)

SUFFERING NOSTALGIA FOR R-1 IND CARS???---One of these venerable heaps now serves as a dining room at Golden's Deli, Richmond Ave., Staten Island, NY. Original lights and fans in place, seats reupholstered.

WHY I AM A CYNIC. In late summer, our local political party (New York has but one, same as in Boston and Chicago) had a primary campaign. All the pols had something to say about TRANSIT. None of it too well informed, perhaps, but then the pols don't use the transit system except for the one obligatory pre-election ride with photographers. The City has a large fleet of attractive motor cars with chauffeurs for the use of our lords and masters. As I probably said before, the last mayor to commute by subway was Gaynor and that was before I was born. Which is one helluva long time back, believe me. A good big piece of City Hall Park is a free parking lot for the pols but you'll pay up to \$20 a day to park in that area and have no City police assigned to keep kids from stealing your hub caps. So also with the park at Boro Hall, Brooklyn. This is democratic government at the local level. As Orwell said, "We're all equal but some are more equal than others." During the blizzard of words, the pols all pledged "commitments" to transit. Just what in hell is a commitment? Every four years we hear the same babble and nothing gets any better.

JAPAN---Japan National Rys. is one of the world's busiest systems. It was a real surprise to read in our local paper that the Japanese government plans to break it up into six or seven regional systems. Finances are the problem. Huge deficits. JNR already has sold off some branch lines to local groups which were told they could buy them or see them closed.

Soon (if not already) the Tohoku Shinkansen (Eastnorth New Trunk Line) of JNR to open the southern terminal section from ~~Hiro~~ into Ueno. Ueno is one of JNR's main Tokyo terminals. 17 miles long. *OMIYAS*

British Rail started the work of electrifying the East Coast main line (London-Edinburgh) on Feb. 7. Completion in 1991.---SANTIAGO, CHILE to proceed with a third subway line. Rubber tires just like the first two.---SEOUL, KOREA will open subway Lines 3 and 4 soon (maybe open now).---HONG KONG was due to open more subway last May 31.---In RUSSIA, Odessa is to get the country's 19th metro. 6 3/4 mi. Novosibirsk's 8-mi. line to open soon. First lines in both Kuybishev and Denpropetrovsk to open late this year. Gorky to open next Year and

Sverdlovsk in '88. New Leningrad, Kharkov and Kiev lines under way.

HISTORY---Too few of us left who rode Public Service's (NJ) Palisade line from Weehawken to Palisade Jcn. It opened May 13, 1894, from the north line of Hudson County to Fort Lee on private way. Steam, I think. On May 6, 1895, 'twas extended a short distance from Fort Lee to Coytesville. From Sept. 1, 1895, it was operated as a trolley line by the North Hudson County Ry.

THIRD AVENUE R.R. (N.Y.)---In 1868 it carried about 22 million people, had 186 cars and 1475 horses, per The Times of 7/13, 1869. This was mentioned in a long story on poor local transportation which included some info on "L" construction. Each little 3d Ave. car carried over 118,000 in 1868.

Same paper for Sept. 15, 1869, said the Avenue C-Houston St. line was to open about Oct. 5. Construction began on August 1. 30 Stephenson cars of the latest style and 325 horses. Depot in 10th St. near Ave. C.

BROOKLYN---According to the same Times, May 18, 1885, there was no service on the Brooklyn "L" the day before, the line being closed to inspect the 15 new locos and the cars. At the time, 15 more locos were on the way, as well as 45 cars.

STORAGE BATTERY CAR NOTES---from the letters sent by kind fellow members and a bit of my own reading.

3d Avenue Ry.'s City Island line began using storage battery cars on August 18, 1914. 12 cars taken to the isolated line by lighter (a barge with derrick.)

Central Vermont RR experimented with them in 1914.

World War---German Army used storage battery cars from different German state systems in hospital train service in Belgium (1914 war).

Pennsylvania RR---on November 16, 1914, a storage battery car ordered from the Railway Storage Battery Car Company (NY) by the Lorain, Ashland & Southern Ry. (O.), carried PRR passenge Newark, N.J., to Holmesburg Jcn., Philadelphia, while on its way to the Ohio owner. Performed well.

Cambria & Indiana---a confusing note---on Dec. 9, 1914, a new 50' car in service, replacing an old 35' car. On its 2 1/2-mi. Colver Hts.-Colver section, a constant 5% grade, used 600 V. overhead.

Milledgeville Ry. (Ga.) began using a storage battery car in Nov. 1913. Ran on Central of Georgia track between M^oville and a State sanitorium, 3 1/2 mi. Brill single truck, 26 passenger car.

Miami (Fla.) Traction was scheduled to open in Dec. 1915 with Brill four wheelers.

Chattahoochee Valley Ry. used a 22' storage battery car, #316, from West Point, Ga., to Standing Rock, Ala., 17 miles in 1916.

TOWSON & COCKEYSVILLE ELEC. RY., Baltimore County, Md.--operated about 1910-22. Actually ran Towson to Timonium, half way to C'ville. Met Balto.'s United Rys. line 8 at Towson. Had two arch roof Brill storage battery cars, Nos. 1 & 2. Member Martin K. Van Horn wrote that male passengers were sometimes asked to get off and push when batteries ran down on hilly line.

I am uncertain whether I will be writing any more of these letters. If not, I want those who have responded at times to know I enjoyed the contacts.

Sincerely,

F. J. Goldsmith, Jr.
F. J. Goldsmith, Jr.
Headquarters Reporter