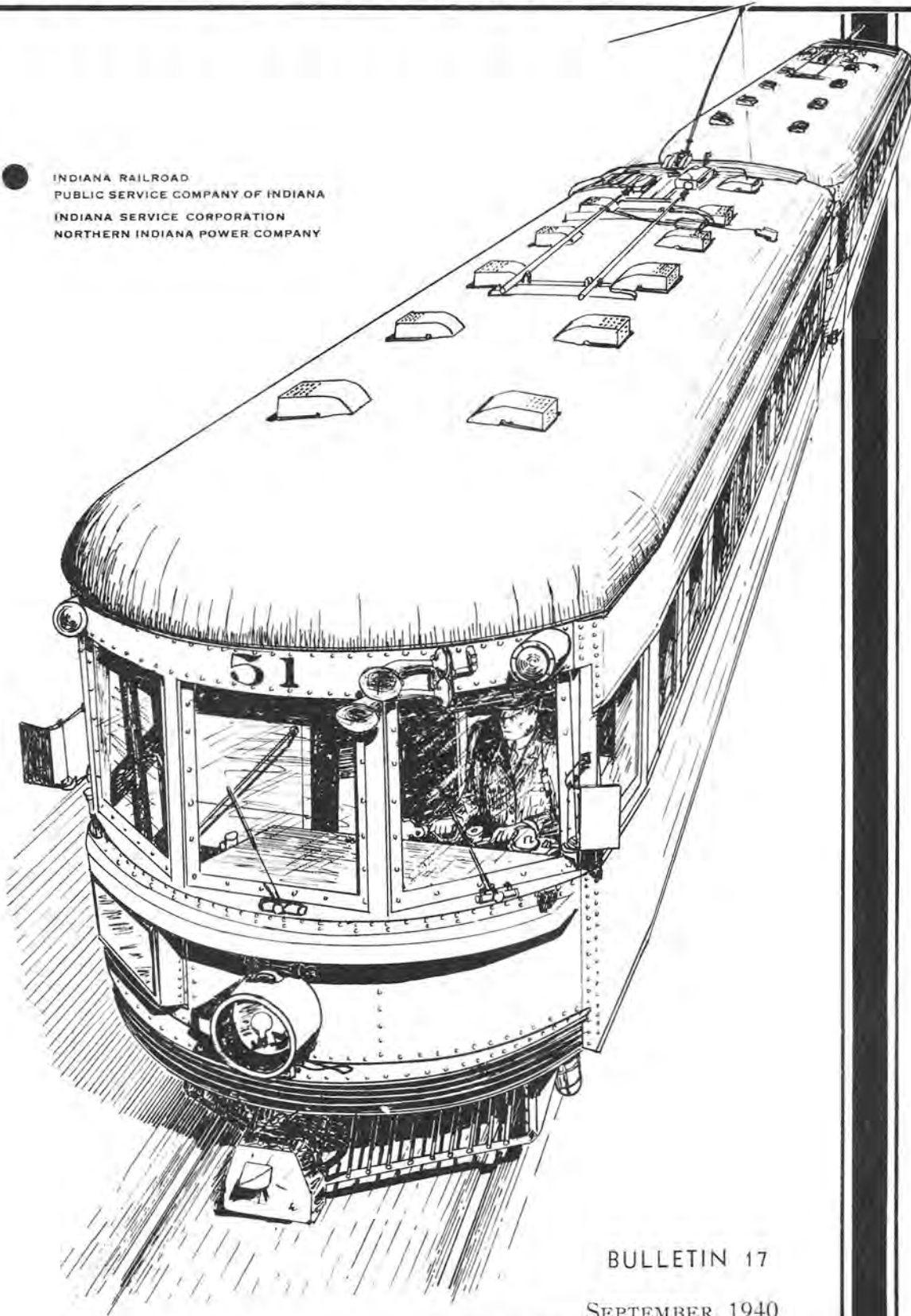


INDIANA RAILROAD SYSTEM

INDIANA RAILROAD
PUBLIC SERVICE COMPANY OF INDIANA
INDIANA SERVICE CORPORATION
NORTHERN INDIANA POWER COMPANY



BULLETIN 17

SEPTEMBER, 1940

CENTRAL ELECTRIC RAILFANS' ASSOCIATION
CHICAGO, ILLINOIS

INDIANA RAILROAD SYSTEM

**FORWARD:**

The story of the Indiana Railroad System is a tale of one of the most interesting and diversified interurban railroads ever operated, the story of a struggle under the most difficult and unfavorable conditions to keep in service a network of inter-city electric railways gridding central Indiana. Here is the last stand of the "interurban" (in its original sense) in the entire midwest. Possibly no other railway property has been the subject of more railfan interest and comment -- both praise and criticism.

For this reason in this bulletin our viewpoint has shifted from the customary analysis of road, equipment and operation from a technical stand to a searching study of the why-and-wherefor of the gradual failure despite all efforts of a ten-million dollar railroad located in the center of one of the densely populated industrial-rural territories of the land, combined with accurate and concise data on the technical features.

The Indiana Railroad began as a consolidation of a number of underlying electric railway companies each with a history of 20 or more years of operation, starting with the original line of the Union Traction Company between Alexandria and Anderson in 1897. Each of these companies built its own power station and, as a side line, branched into the sale of electric energy to the public. Gradually the utilities expanded until they overshadowed the railways which had developed the communities that made the power companies great. With the advent of the automobile and paved roads the individual need for interurban service diminished rapidly and the advantages of consolidated operation with its economies and efficiencies of service and management became apparent. Attempts were made from 1925 on to merge the railways but the objections of security holders, fearing the relative value of their holdings would not be protected, deadlocked proceedings until eventual receivership and bankruptcy of the principal companies enabled these claims to be wiped out. Finally, on July 2, 1930 agents for Midland United, an Insull holding company, purchased the Union Traction Company of Indiana at foreclosure, beginning the separation of power from railway operation and founding the Indiana Railroad. Here we deal only with the Indiana Railroad and the Indiana Railroad System from that date to the closing of forms, late in August 1940, for this bulletin; the story of the underlying companies prior to 1930 is reserved for future study.

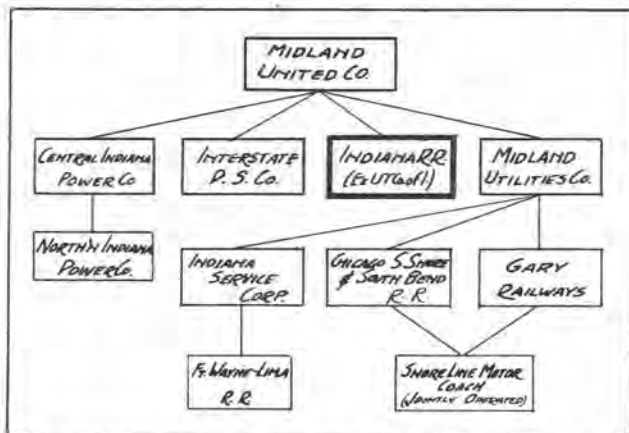
As to equipment, there followed after the organization of the new company, some interval before a rolling stock roster could be stabilized by the acquisition of new cars and the retirement of old, to meet new requirements, and during this period most all of the equipment of the old roads was in existence on Indiana Railroad lines. For clarity then, this bulletin deals only with equipment in service on the Indiana Railroad System after 1934.

DATE	Indpls-Muncie-Ft Wayne	Muncie - Newcastle	Indianapolis-Seymour	Indpls - Terre Haute	Seymour - Louisville	Indpls-Peru-Ft Wayne	Indpls - Newcastle	Newcastle-Richmond	Richmond - Dayton, O.	Ft Wayne-Wat'oo-K'adyle	Marion - Frankfort	Anderson - Marion	Peru - Lafayette	Terre Haute-Paris, Ill.	Indpls - Danreith	Marion-Bluffton	Tipton-Alexandria	TOTAL SYSTEM MILEAGE
	Miles: 123	19	62	72	55	135	45	39	40	42	53	34	55	22	39	32	20	887
9-28-30	x	x	x		x	x	x			x	x	x	x			x	x	675
6-30-31	x	x	x	x	x	x	x	x		x	x	x	x			x		827
8-16-31	x	x	x	x	x	x	x	x		x	x	x	x	x	x			795
1-5-32	x	x	x	x	x	x	x	x		x	x	x	x	x				756
1-26-32	x	x	x	x	x	x	x	x		x	x	x	x					734
5-22-32	x	x	x	x	x	x	x	x		x	x	x						679
7-1-32	x	x	x	x	x	x	x	x		x								592
3-9-36	x	x	x	x	x	x	x	x	x	x								632
3-15-37	x	x	x	x	x	x		x	x									590
5-9-37	x	x	x	x	x	x												466
9-11-38	x	x	x	x	x													331
11-1-39	x	x	x	x														275
1-11-40	x	x	x															204

Marion-Wabash, 20 mi.; Kokomo-Logansport, 20 mi; and Muncie-Portland, 32 mi. were abandoned Sept. 15, 1930, prior to Indiana R.R. system operation but under the ownership of Indiana R.R. Short branches were abandoned; Watson Jct.-Charlestown in spring of 1933, Jeffersonville-New Albany in spring of 1934.



HISTORY: (1930-1940) On July 2, 1930, A. W. Brady, Receiver, sold the Union Traction Company of Indiana to the Indiana Railroad and after a few months arrangements were made for the general supervision under a system management of the interurban railroad properties of the three affiliated Midland United companies, the Indiana Service Corporation, the Northern Indiana Power Company, and the Interstate Public Service Company (reorganized at this time as the Public Service Co. of Indiana). Before Indiana Railroad took over active operation the abandonment of three short unproductive branches of the Union Traction was effected. Then came the coordination of management with Henry Bucher as General Manager and L. M. Brown as General Superintendent of Interurban Lines.



RELATION BETWEEN INDIANA UTILITIES IN 1931

1932 brought the system down to a solid 600 miles of main stem. With this network the company rolled its trains right thru the worst depression years and, with the short spurt in business in 1936, it actually expanded by purchasing, for junk, the Dayton & Western Traction Company line from P. A. Hommel, Receiver, rehabilitating the road sufficiently to withstand the operation of fast heavy cars. But this is a little ahead of the story.

The real story of interurbans in Indiana goes back into the 1890s when the discovery of natural gas wells in a number of locations in central Indiana laid the way for a boom in manufacturing in relatively small towns in a predominantly rural region. Members of farming families could get work in the mills at Anderson, Elwood, Gas City, etc., but could live at home, riding to and from work on the Interurban. In fact, the "Interurban" was practically invented in Indiana by the Jim Hill of the traction industry, Charles L. Henry, who coined the name for his line from Alexandria to Anderson. For a time cheap fuel and labor and good rail connections drew industries to Indiana and the interurbans, primarily passenger carrying railways, thrived on it. But two developments followed the advent of the 1920s to the detriment of the interurban railway. First, the natural gas supplies became exhausted, shutting off the sources of cheap fuel. Next came that ever present factor in electric railway history, the automobile and the hard road.

Indiana at first lagged behind other states in the development of a good network of hard roads, altho one of the earliest autos was made in Kokomo. This favored the interurban for a while. Many of the small manufacturing plants took up the building of automobile parts and accessories, utilizing low labor and overhead costs; this too favored the interurban. Eventually, however, beginning particularly about 1925, the model T and other low-priced cars began to worm their way into the particular field of the interurban -- hauling workers and farmers to and from markets, shopping centers and mills, and the more elaborate cars began to appeal to the traveling men with their customary heavy and bulky sample cases, tapping off another lucrative source of interurban traffic. Then the interurbans began to look toward the development of freight business to offset the drop in passenger movements but handicaps appeared at once. In building, it seems one of the big advantages of electric operation was that you could put all manner of difficulties in the way -- grades, street operation, sharp curves, and still run quite freely over them and with light rails and bridges at that, WITH SHORT LIGHT PASSENGER TRAINS. But moving long freight trains, particularly with equipment of the types standard on the steam railroads for interchange, was another thing altogether, and now that the companies needed these "hazards" removed so urgently they had little capital with which to make such changes. Net result: interchange freight in almost all cases was shut out except over restricted sections of line, and all freight had to be less than carload lots, or if carload, it had to be trans-shipped into the interurban companies' freight cars, at the expense of handling and important hours of time in transit. Despite these handicaps the men of Midland United saw in the Indiana Railroad the possibilities of an electric railway system that would match, or even outdo, the fine railroad they had just made of the Chicago South Shore & South Bend Railroad and a year or two sooner of the Chicago North Shore & Milwaukee Railroad and the Chicago Aurora & Elgin Railroad. New passenger cars, substations, freight cars, enlarged terminals, reduced grades and curves, belt lines and revised routing, heavy rail, double tracks in some places and all the other refinements that make an ideal road were in the plans, but only the first two points and slightly the third came to pass. Possibly, if they'd had a few more years start on old man depression -- well, who knows? As it was, when mills, factories and banks began to shut down, a property so close to the pulse of the public could hardly stand off unaffected, and on June 28, 1933, Bowman Elder was named Receiver of



Indiana Railroad by the courts, altho the other three utilities whose railroads comprised the system weathered the storm without reorganization, due to the strength of their power business, constantly growing thru rural electrification.

After receivership, conservation of assets was of prime importance but this did not prevent the Receiver from making numerous improvements to line, equipment and service (as described in the technical data) and as general business conditions improved in 1935-36 the interurban staged a brilliant comeback, winding up the latter year with actually a net income. Then came a turning point, and from 1937 to date the story is one of recession with an obvious trend to the cessation of all interurban rail service of the system. In 1937 a period of labor strife fell over the country in general but particularly on a number of Indiana towns served by the system. This was the result of an overpowering growth of unionism upon an unprepared set of managers in the various industries effected, causing a considerable slowdown in commercial output in the area. The Railroad itself had a strike on its hands, called by employees of the obsolete 25 cycle generating plant at Anderson and backed up by the only recently established Amalgamated union of shop workers, city train and busmen, and some of the interurban trainmen. Shutdown of this power plant tied up those portions of the road served by 25 cycle a-c supply, and while, at the end of the strike, the Amalgamated boys got some well earned raises, the excessive cost of operating the 25 cycle plant became unbearable and it had to be shut down. Increased costs in the face of traffic dwindling in the recession period put the marginal Richmond-Dayton line up for abandonment, and when this line was pulled the Anderson line could be changed to 60 cycle with relatively few substations to replace and the Anderson power plant was closed.

Up to this point the Indiana Railroad was entirely a railroad enterprise, having disposed of all bus operation handed to it by predecessors except suburban service at Indianapolis, and while it was one of the first to have its own trucks, they were entirely in free pick up and delivery service feeding to the railroad in lcl business. In 1938, however, the company evidently began to see that a definite change was again taking place in the territory served, a change that was pushing away some small industries, centralizing others with workers nearby and in general tending to put a permanent decrease in the volume of traffic, a decrease that would make rail operation that had been marginal even in the '36 boom definitely unprofitable and a loss that power and holding companies could no longer stand behind. Rather than go out of business entirely with almost a thousand employes and officers, it was decided to take the unwilling step to buses and trucks. The Peru line, weakest of those remaining, was chosen for the test, and following this, motor operations were extended as rails came out until at this date only two lines remain. At that, this is still a full quarter of the maximum mileage operated by the system.

ROAD & STRUCTURES: Because of its composite makeup the Indiana Railroad System had almost every variety of interurban construction represented. The Indianapolis-Terre Haute line, for example, even tho it came to IR from a single company, contained the three principal styles of roadway - adjacent to steam railroad (Indianapolis-Greencastle), cross country with heavy cut and fill (Greencastle-Brazil) and side-of-the-county-road, crossing from one side to the other of the pike, running in the center of the road thru towns and with almost no cuts or fills despite the rough "Highland" terrain (Brazil-Terre Haute). In general, however, most of the lines were of the first type, running across country, parallel to existing steam lines, single track with passing sidings of 5 or 6 car average capacity at intervals of about 2 miles. Running rail varied from 60 lb. to a little 100 lb. with the majority 70 lb. and most of the lines were ballasted with gravel or cinders, altho a few miles had crushed rock. In later years weeds began to flourish on the once perfectly clean roadbeds, but while not so attractive in appearance these weeds certainly kept down the dust!

Track circuit block signals were quite extensively used on the principal lines, but none seems to have ever been completely protected from end to end, altho all treacherous spots were signaled. Trolley contactor signals were used only in a few city locations, as were 2 or 3 hand operated signals. Crossing protection at minor crossings consisted of the standard cross-buck but in recent years a number of standard flashing signals were put in at busy roads, and there was one installation of automatic gates, at Rose Polytechnic crossing on the Terre Haute division.



INDIANAPOLIS TERMINAL - 1934

Bridges and viaducts were substantially built, especially on the Union Traction lines, and were capable of handling the heaviest interchange equipment. Station buildings on most divisions were small frame structures, not very attractive. In exception of this, the Union Traction had large buildings, usually brick, at all the principal towns and spacious frame stations served the small towns. After the one-man plan of operation, with its concise fare register accounting, became general the large waiting room terminals were disposed of and agencies discontinued in some smaller towns.

Most interesting terminal on the system, and probably anywhere, is Indianapolis Traction Terminal. Built in 1904 to accomodate the trains of 12 routes, the station had 9 tracks under a huge trainshed half a block from the state Capitol; train departures here were in the hundreds daily for years. Now only

two tracks are in use, the remainder having been paved over for use of busses. Other points with trainshed passenger stations are (or were) Muncie, Seymour, Louisville and Frankfort. Spacious open terminals were maintained at Terre Haute and (still in) at Fort Wayne. (See: Freight Traffic)



POWER & LINE: The present lines of the Indiana Railroad System are operated on purchased 60 cycle power fed in to the substations by transmission lines on the railroad's line poles. There are a number of automatic substations, installed since the advent of Indiana Railroad, of both rotary converter and mercury arc rectifier types, but the majority of stations are manually operated, usually with a single 300 or 500 kw rotary, located so that the operator can have additional duties in station or shop work. The most modern substation equipment is exemplified by the Bucy and Pendleton rectifier stations, placed in service in the summer of 1931. These are Brown-Boveri units rated at 850 kw at 625 volts continuously, or 1275 kw for overloads up to 2 minutes in duration. Originally these stations were on the 33 kv 25 cycle line fed from Anderson power plant, but when this plant was closed in 1937 they were changed over to 60 cycle service by reconnecting the transformers. The primary leads are protected by expulsion fuses instead of oil switches and the over current trip and multipole carbon breaker is placed between the transformers and the rectifier. Protection is provided against sudden overload, continuous overload, reverse current, low vacuum, excessive temperature, water failure and undervoltage. In case the DC feeder breakers are tripped out by overload a reclosing relay makes 3 attempts to close in and if the line is not clear on the third attempt it locks out the station until manual help can be summoned. A nearby deep well furnishes water for cooling.

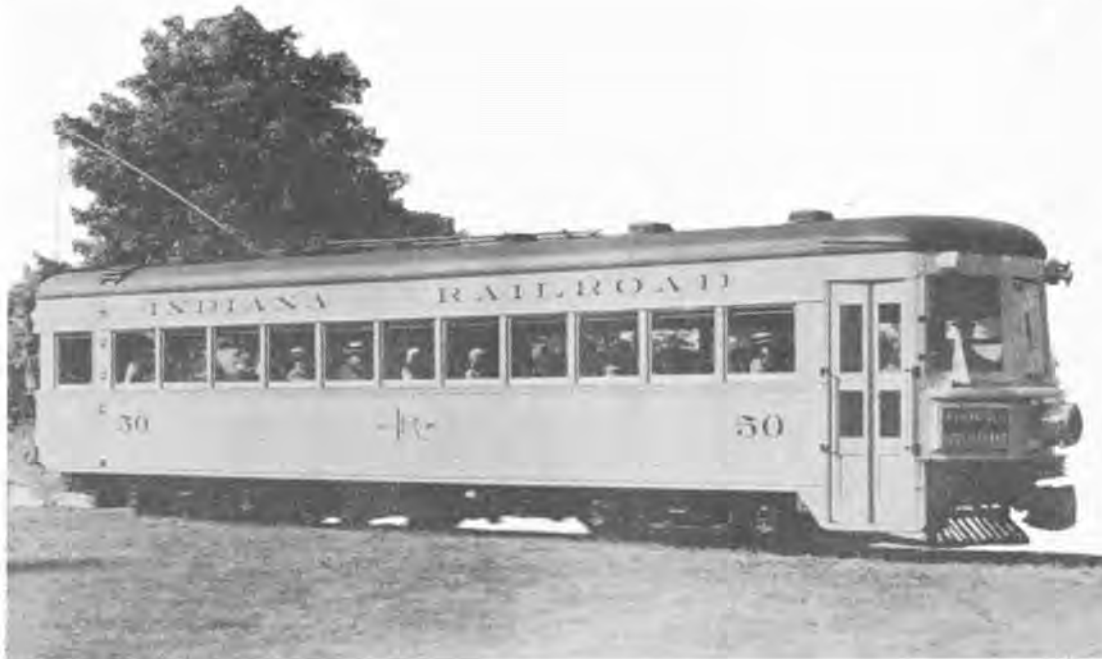
Line construction at present and on the former lines as well was standard, using 4/0 grooved trolley wire with parallel feeder as required by load conditions. Direct suspension was used universally, except on the Dayton & Western Traction line which had a light simple catenary. Bracket suspension from poles on 100 ft. centers is the rule altho some span wire construction is in use, chiefly between Indianapolis and Anderson, and on curves.

ROLLING STOCK: During the first 4 years of the Indiana Railroad System the variety of equipment in use in passenger operation is overwhelming. The equipment of the underlying companies was largely comprised of various wooden cars, most with reinforced underframes and many with steel sheathing that improved appearance but added little to the strength of the car. These wooden cars were 20 years and more in age and entirely obsolete on a modern railroad. The Interstate and the Indiana Service each had a few steel cars of heavy or medium weight and the Union Traction had about 25 heavy steel cars; all of these were suited to continued service, but the company decided that the new vehicles it must order should be of a radically different and improved type that would offer a real inducement to "Ride Interurban" in preference to other modes of travel.

Thirty five luxurious electric rail coaches were delivered in the late summer of 1931 "to mark a new era in electric railway transportation for Hoosierland." These cars, together with substations, represented an expenditure of \$1,450,000 toward giving the public a fine modern railway system. A few lines quoted from "HOOSIER TRAVELER" Number 1 (and the last), issued late in 1931 when the cars which immediately became known as "the high speeds", went into fast service, describe them in the glowing but in this case not exaggerated words of the publicity man:

Answering the modern demand for quick, safe transportation, the 35 new deluxe cars have been equipped with specially designed and constructed motors capable of driving them at speeds of 70 miles an hour and more. In addition to the powerful motors, a streamlined exterior with rounded contours reduces wind resistance and adds to the speed of the cars.





They have a remarkably rapid pickup after a stop and soon reach full speed. After long research and experiment, the new cars have been equipped with a number of safety devices designed to insure safe travel at increased speed. A new type air brake (Ed: M-33 engineer's valve, self lapping type) with double shoes clasp both sides of each wheel has been used. In addition each car has a system of electro-magnetic brakes, which create a magnetic field between a special shoe and the rails, thus adding to the certainty of control. (Ed: Mag brakes lowered to rail by air, raised by spring.)

The cars have an extremely low center of gravity. The main body of the car is built of sturdy, light aluminum alloys, having great tensile strength. The powerful, high speed motors are set close to the ground between specially constructed trucks, designed to eliminate much of the side sway as the car travels...

No detail has been overlooked in a determined effort to make these cars express the utmost in travel comfort, attractiveness and beauty. Fourteen of the cars are equipped with a special observation-lounge compartment occupying the rear third of the car space. This type of car will be used on the Hoosierland Flyers between Indianapolis and Ft. Wayne and on the Dixie and Hoosier Flyers between Indianapolis and Louisville. The observation compartments will be available to all passengers without extra charge...

Thick carpeting covers the floor. The pattern of the carpet blends artistically with the two-tone shading of the walls and ceiling, which varies in each car to complete an attractive, modernistic color scheme... In the coach compartments of both the observation-lounge and standard cars are individual easy seats of air-cushioned leather. Headrests on each chair and arm rests at the sides assure complete relaxation... In the summer electric fans furnish cooling breezes. In the winter the cars are heated by electricity.. Lights on all these cars operate independently of the trolley, and do not fluctuate with trolley current. (Ed: A 32 volt battery, charged by a motor generator set, provides lighting energy.) ...

The investment of such large sums implies a substantial faith in the future of the territory served by the lines between Ft. Wayne, Indianapolis and Louisville. Officials of the company feel that the public needs and desires this type of fast, economical transportation and it is their aim to furnish it... (End of quotation)

Additional data on these cars will be found in the roster notes and drawing.

With the advent of the high-speeds and abandonments of some of the lighter lines, the wooden equipment could all be retired, and the heavy steel cars equipped the lines not using high-speeds. In 1935 the company secured the railway-post-office contracts abandoned by the Nickel Plate Road between Peru and Indianapolis and between Ft. Wayne and Newcastle, and for this service three of the ISC steel cars were revamped with the standard 15 ft. RPO compartment. In 1936 all suitable heavy steel cars were rebuilt for one-man operation, the changes involving turning about, installation of safety devices and Ohmer register, and general reconditioning. At this point the orange color scheme was made standard on all cars.

In 1935 the ten former Northern Indiana Railway light weight cars were placed in service on the Ft. Wayne via Peru run, and later they were used on the Richmond - Dayton run out of Indianapolis, but they proved out the best in suburban service on the Ft. Harrison and on the Muncie-Newcastle runs.

The balancing speed of the high-speed cars with field taps is 83 mph., without taps 72 mph., and the gear ratio 24:43. The balancing speed of the heavy cars, as exemplified by the typical 427-441 series, was 60 mph., and the gear ratio 26:51.

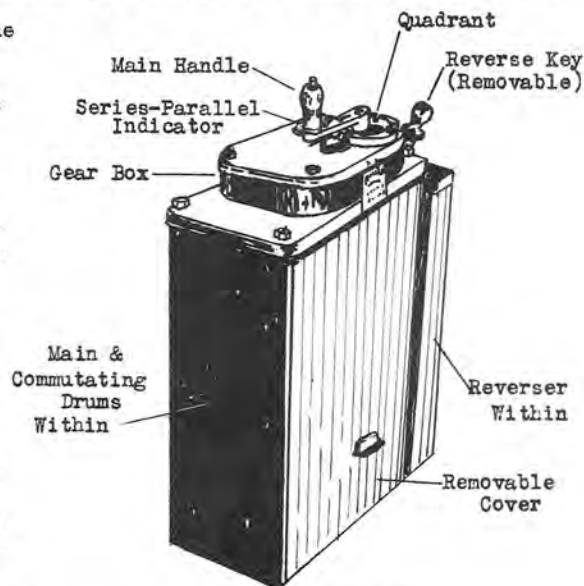


With regard to freight equipment, the wide variety of types of the underlying companies is very well represented in the Indiana Railroad roster. In 1935 a joint roster in a continuous series of numbers beginning at 700, a series established by the Union Traction Company, was laid out, and all motor freight, work and line service cars were assigned places in the roster. One by one as the cars came into the shops for repairs they were overhauled, repainted and renumbered.

The typical Indiana Railroad freight motor has four motor equipment of 100-125 hp. motors geared 16:61 giving a top speed of 40-45 mph. light, or 30-35 mph. with two to four trailers. In recent years the tendency has been to HL remote control, altho this is not arranged for multiple unit operation. The most interesting controller on the lines is the L4 type, one of the earliest and most substantial types of platform controllers built for heavy duty, and very commonly used on the Indiana Railroad for freight and work motors. It will be noted in the roster that most equipments of this type came from the Union Traction, where they were taken from the original passenger cars.

The L4, colloquially known as a "coffee-grinder", contains within a spacious box all the necessary drums and segments for cutting in and out of motor resistance. It differs from K controllers in that a separate drum is used for resistance control than for commutating (series-parallel changeover). On top of the controller there is a gear and motion box driven by the main handle to operate these drums in proper sequence. The reverser is operated by a sizeable key, and is in a cabinet on one side of the main controller. In operation, the main handle is revolved $\frac{1}{2}$ turn to reach full series, the next $\frac{1}{2}$ turn reverses the main drum back to open circuit of all motors, then a third $\frac{1}{2}$ turn cuts resistance out again to full parallel. To shut off, the handle is revolved a fourth $\frac{1}{2}$ turn which cuts resistance back in and finally opens the circuit, bringing the controller back to the starting condition. An indicator on the cover plate shows whether the controller is in the series or parallel position. Operation is flexible, altho it calls for some elbow grease, but the handle may be revolved in either direction as desired. Protection is provided by an overhead circuit breaker, and to avoid burning of control fingers when shutting off under accelerating loads the usual practice is to trip out the breaker manually, then shut off the controller.

In addition to the freight motors, most of which could be used for lading, the system had several hundred freight trail cars (not suitable for steam road interchange, but readily interchanged with Ohio interurbans) of practically every type, side and center dump, gondola, box, express and live stock. These cars had radial drawbars and interurban standard devices.



THE L-4 CONTROLLER



INDIANA RAILROAD SYSTEM

INDIANAPOLIS - NEWCASTLE - RICHMOND - DAYTON, O.

STATIONS	INDIANAPOLIS	NEWCASTLE	RICHMOND	DAYTON, O.
INDIANAPOLIS	7:00 AM	7:15 AM	7:30 AM	7:45 AM
NEWCASTLE	7:15 AM	7:30 AM	7:45 AM	8:00 AM
RICHMOND	7:30 AM	7:45 AM	8:00 AM	8:15 AM
DAYTON, O.	7:45 AM	8:00 AM	8:15 AM	8:30 AM

INDIANA RAILROAD SYSTEM

Consolidated Schedules

ELECTRIC TRAIN AND MOTOR COACH SERVICE

The Meaning of "Dependable Service"

When somebody asks our representatives what we mean by "Dependable Service" Here is one answer:

932. Literally, bus shipments through the Indiana Railroad System, damage to the car for the hauling of shipping of one per cent weight.

TRAVEL by INTERURBAN

THE FAST DEPENDABLE LOW COST TRANSPORTATION

ROUND TRIP 1 1/2¢ PER MILE

TRAVEL by INTERURBAN

COMPARE

Cost of automobile travel by Interurban

Cost of automobile travel by Interurban

Cost of automobile travel by Interurban

Be SAFE and SAVE!

Be SAFE and SAVE!

TRAVEL by INTERURBAN

TRAVEL by INTERURBAN

TRAVEL by INTERURBAN

INDIANA RAILROAD SYSTEM

15 14 15

INDIANAPOLIS - NEWCASTLE - RICHMOND - DAYTON, O.

INDIANAPOLIS - NEWCASTLE - RICHMOND - DAYTON, O.

INDIANAPOLIS - NEWCASTLE - RICHMOND - DAYTON, O.

INDIANA RAILROAD SYSTEM

INDIANAPOLIS - KOKOMO - PERU DIVISION

TIME TABLE NO. 60

Effective Sunday, September 26, 1937. At 4:01 A. M. Central Standard Time.

Superseding previous date.

INDIANAPOLIS - READ DOWN - SOUTH BOUND

STATIONS	INDIANAPOLIS	KOKOMO	PERU
INDIANAPOLIS	7:00 AM	7:15 AM	7:30 AM
KOKOMO	7:15 AM	7:30 AM	7:45 AM
PERU	7:30 AM	7:45 AM	8:00 AM

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TRAVEL by INTERURBAN

THE FAST DEPENDABLE LOW COST TRANSPORTATION

ROUND TRIP 1 1/2¢ PER MILE

TRAVEL by INTERURBAN

COMPARE

Cost of automobile travel by Interurban

Cost of automobile travel by Interurban

Cost of automobile travel by Interurban

HOOSIER TRAVELER

Modern Electric Cars Introduce New Era in Swift, Comfortable Transportation

TRAVEL by INTERURBAN

TRAVEL by INTERURBAN

TRAVEL by INTERURBAN

Announces NEW, COMPLETE UP AND DELIVERY SERVICE * WITHOUT EXTRA COST

Effective October 16, 1935

SERVING OVER 1000 POINTS

More than 1,000 points in Indiana, Illinois, Michigan and Ohio can be served, most of them overnight, none later than second morning. With this new service shippers are assured of interurban responsibility at a rapid, convenient handling charge.

INDIANA RAILROAD SYSTEM

Consolidated Time Tables

10-Ride Commutation Tickets at 1.35¢ a mile

Less than the cost of gas and oil for your car

STATION PHONE

INDIANA RAILROAD SYSTEM

INDIANAPOLIS - KOKOMO - PERU DIVISION

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SELLING SYSTEM SERVICE

VOL. I, NO. 1 - INDIANAPOLIS, INDIANA - MAY, 1939

Published Monthly by the Traffic Department of the Indiana Railroad System for the Information of Employer

INDIANA RAILROAD SYSTEM

LOW PASSENGER FARES NOW IN EFFECT

February 1, 1935

STATIONS	INDIANAPOLIS	KOKOMO	PERU
INDIANAPOLIS	7:00 AM	7:15 AM	7:30 AM
KOKOMO	7:15 AM	7:30 AM	7:45 AM
PERU	7:30 AM	7:45 AM	8:00 AM

TRAVEL IN COMFORT

Take The Advice of EXPERIENCED TRAVELERS

Ride the Interurban

When you travel by Interurban, you get your destination faster and relaxed road worries or traffic hazards. Without leaving your car, you can enjoy a comfortable trip on the Interurban. 1 1/2 cents a mile, round trip, or one way.

INDIANA RAILROAD SYSTEM

Consolidated Time Tables

10-Ride Commutation Tickets at 1.35¢ a mile

Less than the cost of gas and oil for your car

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Go Via Electric Railway

Ask Agent Regarding Schedules and Special Rates

SELLING IS EVERYBODY'S JOB

It takes a good many different types of people to run a transportation system, and each must be a specialist in his line. Some of us have spent years learning about the business and we have a right to be proud of our skill on the job.

Trucks, cars and buses are important, of course, but the price of the service is the responsibility of the man who sells it. It is a responsibility that really makes the machine work for any of us.

Over and above that individual skill, however, is the public's responsibility to the man who sells it. It is a responsibility that really makes the machine work for any of us.

By selling, I do not mean, of course, that all of us must go out and sell tickets. It means that we must all have a sense of responsibility toward the public. It is a responsibility that really makes the machine work for any of us.

In this sense, selling is as much a part of our responsibility as operating a car or bus. It is not a difficult task to acquire and when practiced habitually adds a new zest to the job. It is a job that we owe ourselves as much as the railroad.

INDIANA RAILROAD SYSTEM

LOW PASSENGER FARES NOW IN EFFECT

February 1, 1935

STATIONS	INDIANAPOLIS	KOKOMO	PERU
INDIANAPOLIS	7:00 AM	7:15 AM	7:30 AM
KOKOMO	7:15 AM	7:30 AM	7:45 AM
PERU	7:30 AM	7:45 AM	8:00 AM

Be SAFE and SAVE!

TRAVEL IN COMFORT

Take The Advice of EXPERIENCED TRAVELERS

Ride the Interurban

When you travel by Interurban, you get your destination faster and relaxed road worries or traffic hazards. Without leaving your car, you can enjoy a comfortable trip on the Interurban. 1 1/2 cents a mile, round trip, or one way.



TRAIN OPERATION: Since the majority of all trackage of the Indiana Railroad System is and was single track a rigid system of train operation has been enforced from the start. Some of the underlying companies, early in their experience, in trying to simplify the knowledge requirements of their trainmen, had terrible wrecks at least partially the consequence of this laxity. Anxious that this should never be the case on the Indiana Railroad a rule book practically equivalent to the standard code used on steam lines was adopted. Because of the added responsibilities attendant on one man operation all classes of trains other than first class and extra were abolished as was superiority by direction. The latter, in rule form, reads: "All scheduled trains of same class or sections of scheduled trains have equal rights to schedule meeting points." In addition, all meet orders are given to fixed points, right or wait orders not being used. Extra trains are sometimes sent on the road with a "run extra" order, but in order to expedite their movements and to further protect them, especially if passenger moves, meet orders are generally issued against first class trains. Another rule, illustrating the safety precautions taken, is: "Dispatcher will issue train orders to all trains operating only on Saturdays, Sundays and Holidays, and opposing trains, specifying the meeting points." To save time in taking orders a special form of train order and clearance is used.

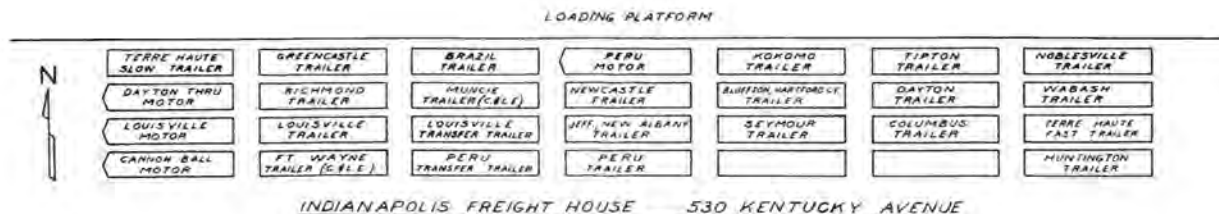
The first one man operation on the Indiana Railroad System was on the Marion & Bluffton division, where cars 201-202 (not in IR roster), Cummings light-weights, were in use. After the advent of the high-speeds with their Ohmer accounting fare registers, one man operation under rapid and frequent loading became practical and in 1936 the heavy cars were converted to one man. This made all passenger operation, with the exception of the Railway Post Office-passenger trains, one man. Freight trains continued under the two man plan, with a brakeman in addition where trains were regularly long, but it was found practical to operate line cars with a single trainman, with the line crew available if needed to protect.

PASSENGER SERVICE: The Indiana Railroad System has had operating experience with almost every type of passenger service. Up to December, 1930, parlor-dining cars were operated (1) on the Indianapolis-Muncie-Ft. Wayne run, using ex-Union Traction cars "Indiana" and "Purdue", (2) on the Indianapolis-Peru-Ft. Wayne run, using Indiana Service Corporation cars 390 "Little Turtle" and 391 "Anthony Wayne", and (3) on the Indianapolis-Louisville run, using the 5 Interstate Public Service cars 158-162. Luxurious steel sleeping cars, 10 section, with windows in uppers, were operated between Indianapolis and Louisville till late in 1932, using Interstate cars 166, "Indianapolis", 167 "Scottsburg" and 168 "Louisville".

The introduction in September, 1931 of the high speed cars brought experience with fast limited trains, with practically a 40 mph. schedule speed between terminals. This meant long country stretches at better than 60 mph. average in order to compensate for urban running at 15 mph. But the limited train has always been a problem to the interurban line whose principal business is the short haul rural passenger. The irregular passenger frequently attempts to flag down a limited at a country stop only to have it roar by leaving him bewildered and angry at the thought of waiting perhaps an hour or two for the next car, and, lacking a time table, he wonders if the next one will stop either. Of course, destination signs and publicity were supposed to alleviate this condition, but in practice the best plan is to provide enough slack in the schedule to permit making a number of extra local stops on all trains and relying on diversity of chance that each train will be called upon to make not more than that number of flagdowns. With this in view schedules have been altered so that instead of some slow and some fast trains, all passenger trains now average about 35 mph.

As to equipment assignments, the high speeds were used on the Indianapolis-Ft. Wayne via Muncie and the Indianapolis-Louisville runs, the 90s were first on the Ft. Wayne via Peru, later on Dayton and finally on Ft. Harrison and Muncie-Newcastle runs, 323-327 were used on lines north of Ft. Wayne, 375-377 on the RPO runs and the heavy rebuilds on all remaining passenger runs.





INDIANAPOLIS FREIGHT HOUSE 530 KENTUCKY AVENUE

THE SKETCH ABOVE DEPICTS A TYPICAL DAILY LINEUP OF FREIGHT (BOX) TRAILERS AND MOTORS AT THE TRANSFER PLATFORM OF THE INDIANAPOLIS FREIGHT HOUSE, AS IT LOOKED IN THE SUMMER OF 1937. BLANK BLOCKS INDICATE SPARE CAR SPACES AVAILABLE FOR EXTRA HEAVY LOADS WHICH MIGHT DEVELOP DURING THE DAY. ABOUT 8 PM THE PERU, DAYTON AND LOUISVILLE THRU FREIGHTS DEPARTED, IN THAT ORDER, TO MAKE WAY FOR THE NIGHT LINEUP.

These were, of course, the normal assignments, and occasionally for short periods and on extra moves the various types of equipment got all over the system.

Passenger fares started out in 1930 at 3¢ a mile one way and 2.7¢ round trip, and commutation rates lowering this somewhat. In 1933 these were drastically cut to 2¢ one way and 1.5¢ round trip, with 10 rides at 1.35¢ and a 500 penny mileage book at \$3.75. This rate remained in effect until the fall of 1938 when falling volume of traffic brought a need for increased unit-revenue and the round trip rate was raised to 1.8¢ and the 10 ride rate to 1.67¢. The latest wrinkle to induce off-peak riding is a series of low mid-week excursion fares, good only Tuesday, Wednesday and Thursday from outlying cities to Indianapolis. This rate is in most cases a little less than the early 1.5¢ rate.

FREIGHT SERVICE: To understand fully the picture of freight operation of the Indiana Railroad System one must bear in mind the numerous electric railway track connections to the lines of the system that existed in the first few years of its history. Thru Richmond and Dayton, connection was made with the Dayton & Troy, Cincinnati & Lake Erie and the Dayton Springfield & Xenia to other Ohio electric lines. Thru Ft. Wayne and Lima connection was made to the Cincinnati & Lake Erie, and Western Ohio lines to the network of interurbans in northern Ohio. Other important connections were at Peru with the Winona Railroad for Goshen and beyond, and at Indianapolis with the Indianapolis & South Eastern Railroad for Connersville and Greensburg. Most of these lines, lacking the capital for modernization such as was planned by the Indiana Railroad System, were liquidated about 1932 and the last of the others quit in 1938, thus spelling the end of car interchange which at the start had furnished outlets to Detroit, Cleveland, Columbus, Cincinnati, Toledo, Akron, South Bend and many hundreds of other points in Indiana, Ohio and Michigan.

Carload interchange with steam roads was limited to a very few stretches of the system, mainly between the larger towns, where sharp curves and limited clearances did not prevent steam road cars free access. LCL interchange on through rate arrangements was effected with a number of trunk line railroads via Peru, Ft. Wayne, Huntington, Richmond, Indianapolis, Greencastle, Terre Haute, and via Louisville to all lines south of the Ohio River. LCL traffic constituted the greater portion of all freight activity on the Indiana Railroad System and focal point of this traffic was (and is) the spacious Kentucky Avenue Freight House at Indianapolis. This mammoth development was built in 1926 to accommodate all of the lines then operating into the city, but with the consolidation economies of space were effected and a part of the terminal turned over to trucking lines. The System then had a freight house building 30' x 928' with a granite block driveway to the north and 5 loading tracks immediately adjacent to the south, and in addition team, storage and run-around tracks. Of the building, 12,000 sq. ft. of floor space were given over to LCL transfer space, the remainder to freight office, stationery storeroom, accounting department office, and garage space. The typical daily lineup of box cars for loading in 1937 included 28 cars, each with a definite destination. The motor cars were generally loaded with freight for transfer to connecting lines or with way freight, while trailers were loaded not to break bulk until in the freight house at destination. There was also a station at 19th & Martindale, in the north side industrial area of Indianapolis, and of course, large terminals for freight handling at each of the principal cities served. The most modern of these freight houses were built at Ft. Wayne and Louisville.

LCL business was stimulated when, on October 16, 1935, the company began free pick and delivery service with 12 trucks at Indianapolis, the first to have this service, later extended to other key cities.

Another freight service, still operated, is the Dispatch & COD Freight, essentially an express operation, for package and small freight shipments. This is handled in the baggage compartments of regular passenger trains and gives speedy delivery between passenger stations.



A day's operation at Indianapolis really began in the afternoon as LCI shipments made up during the day were brought to the freight house by company or shippers' drays. Meantime a switching crew prepared the lineup of equipment for the day, using double door cars where extra large shipments could be expected, and the proper motor cars to handle the trains. Then the truckers loaded the cars with the proper merchandise and the shipping orders were forwarded up stairs to the office for waybill preparation. The first car to leave the lineup was the Terre Haute fast trailer, an express car with passenger car trucks, picked up by a regular westbound passenger car in the early evening. This car was loaded with Terre Haute Transfer freight, destined for points in western Indiana and Illinois, to be transferred immediately on arrival at Terre Haute to trucks and railroads for delivery early the following morning. At about 7 o'clock the loading of thru freights to Ft. Wayne via Peru, to Louisville and to Dayton was closed, and as soon as the waybills could be pouched these trains were ready to depart. The motor car at the head of each of these trains picked up its trailers and left the Terminal. Some of the cars in these trains contained transfer, which like that for Terre Haute must be transhipped during the night and delivered early the following morning, and to give the transfer point agents a head start in their paper work, the waybills for these cars were sent ahead on passenger trains. Then followed a lull at the freight house until about midnight when the way freights, starting from outlying points about sundown, began to arrive. A night lineup was made with these cars and a furious period of transfer followed so that these way freights could turn about and start for their terminals with transferred freight at about 3 am. Then quiet until morning when the thru freight trains returned, with freight, principally for Indianapolis and Indianapolis Connections, to be shifted into the drays of the railroad or of consignees, thus closing the day's cycle.

FORT WAYNE - LIMA RAILROAD: The 64 mile line from Ft. Wayne to Lima, Ohio was operated for its Receivers by the Indiana Service Corporation, and was subject to the supervision of the same officers as of the Indiana Railroad System, and while coordinated as to service and policies with the system, it remained a separate entity up to its abandonment, June 30, 1932.

SUMMARY: In the gradual shrinking of the Indiana Railroad System rail operations the railfan can find no satisfaction, for here was a system that had a little of everything that makes railfans. Still, in view of the circumstances, it would seem that the company has made every effort available to its limited means consistent with reasonable judgment to retain rail operation. Another quotation from "Hoosier Traveler" July, 1931 illustrates the company's viewpoint at that time:

"Officials of the company feel that the public needs and desires this type of fast economical transportation and it is their aim to furnish it. The active support and patronage of the public along these lines will make it possible to maintain, and from time to time expand, the excellent service now being introduced.

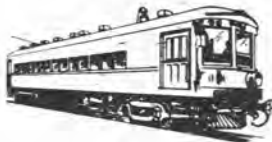
"Service on some lines forming a portion of the Indiana Railroad System has been discontinued, a step made necessary by lack of patronage from the various towns through which the interurbans operated. The lines between Indianapolis, Louisville and Fort Wayne and other main lines connecting principal cities of the state will be continued, developed to the utmost and operated for so long as they continue to receive the whole hearted support from the communities they serve."

In view of this quite definite statement of policy at the beginning, the Indiana Railroad has apparently lived up to the letter and spirit of its promises and, while its life may not be long as judged by commercial enterprise, it is certainly full and treasured in the memory of every railfan who has had contact with it.

BULLETIN 17 - INDIANA RAILROAD SYSTEM - SEPTEMBER 1940
ISSUED BY CENTRAL ELECTRIC RAILFANS' ASSOCIATION (Inc.)

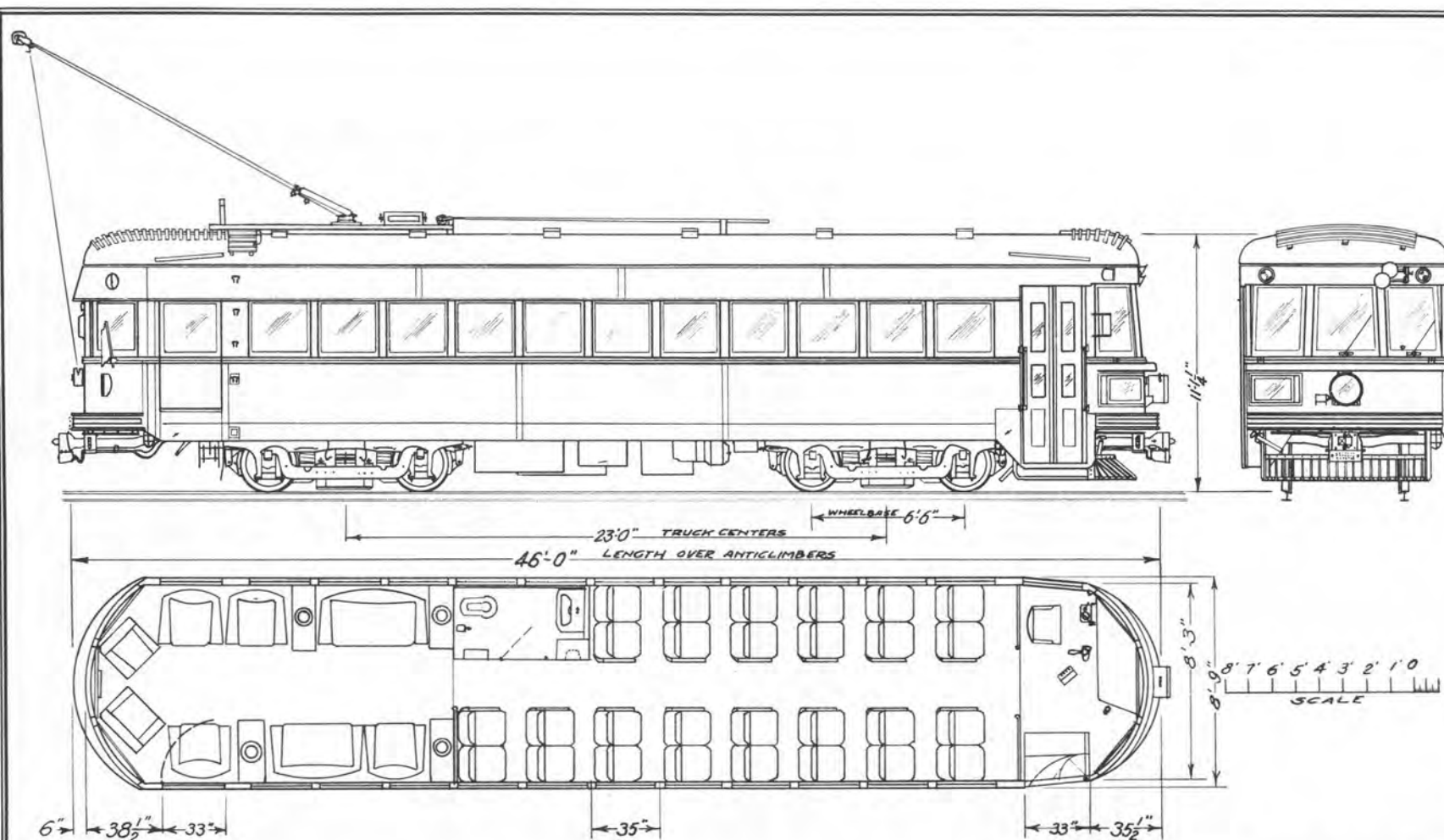
PHOTOGRAPHS:

- Page 4: Indianapolis Traction Terminal in 1934 ... R. V. Mehlenbeck
- 5: Interior of Lounge Compartment, cars 50-61 - Showing accommodations available to passengers at no extra cost.
... Indiana Railroad
- 6: The Finest Cars Ever Built for Pure Interurban Service.
... Indiana Railroad
- 7: Typical Box Motor Freight Car. ... Glenn Niceley
- 10: Railway Post Office-Passenger Car. ... Harry Zillmer
- Cartography: ... Frank E. Butts
- Roster of Equipment, and Reference Notes: ... James F. Cook
- Indianapolis Freight House Lineup, Page 7: Glenn Niceley & R. Konsbruck
- Edited by, and Pen & Ink Sketches: ... George Krambles
- Editorial Assistants: Theo. A. Kawol, Howard Odinius & Robt. Konsbruck



While credit is given above to a few who contributed directly to the makeup of Bulletin 17, lack of space prevents acknowledgments to the many railfans who suggested valuable ideas used in the work, and to the various people of the Indiana Railroad System, particularly the Publicity, Transportation and Shop Departments, without whose help so complete a story could not have been written.

Duplicate copies of this Bulletin may be obtained from the Association at 25¢ per copy, at 1240 Edison Building, Chicago.



Miscellaneous data:

Equipped with Tomlinson air and electric coupling drawbars, Westinghouse HLF control, and bus jumper, for multiple unit operation in trains up to 3 cars using the trolley pole of the head car only.

Has control equipment for emergency operation from rear end of car.

INDIANA RAILROAD SYSTEM

HIGH SPEED LIGHT WEIGHT DELUXE PASSENGER CAR
14 CARS, SERIES 50-63, BUILT 1931 BY A. C. & F. COMPANY
ALSO 21 CARS SIMILAR (64-84) BUILT BY PULLMAN CO.
4-G-E 706 B MOTORS, WESTINGHOUSE HLF CONTROL

DRAWN: H. RAMBLES

DATE: MAR. 1, 1940

ROSTER OF EQUIPMENT

(1) NUMBERS	(2) TYPE CAR	(3) BUILT	(4) BY	(5) WAS	(6) TRUCK	(7) MOTORS	(8) CONTROL	(9) WEIGHT	(10) CAP'Y	(11) RETIRED	(12) REMARKS
INDIANA FURDUE	Parlor-Obs.	1921	J	U-316	Baldwin	Trail	none	52,000	34	10-1936	Note A
50-54	Coach-lounge	1931	A	U-315	"	"	"	52,000	34	10-1936	" B
55	All lounge	1931	"	New	Cumwith	GE-706b	W-HLF	52,000	38		Note B
56-61	Coach-lounge	"	"	"	"	"	"	52,000	24		" B, C
62-63	Coach-lounge	"	"	"	"	"	"	52,000	38		" B
64-84	Coach-bagg.	"	"	"	"	"	"	52,000	40		" B, C
90-99	"	1930	C	N-350 to 359	C	W-516a3	W-K75f	52,200	40		" B
	"							42,500	50	1-1940	" D
301-306	Coach	1905	J	PS	Peckham	Trail	none	54,000	40	1939	" E
323-326	Coach-bagg.	1923	S	I	Cumwith	GE-275	GE-K35	60,000	48	1937	
327	"	1917	S	I	"	"	"	60,000	46	1937	Note F
400-408	"	1913	Ci	U	Baldwin	W-303	W-HL	85,600	45	9-1936	" G
427-441	"	1925	S	U	Standard	W-333vd	W-HL	90,300	44	1-1940	
442,445	"	1913	J	U	Baldwin	W-333	W-HL	85,600	44	1938	Note H
446-449	"	1923	Ci	U	"	"	"	82,900	44	1938	" I
450-456	"	1919	Ci	PS-150 to 157	"	"	"	103,520	44	1938	" J
457-458	"	1926	S	I-378 & 379	"	"	"	101,000	50	1937 1938	
375-377	Coach-RFO	1926	S	I	Baldwin	W-333vd	W-HL	101,000	28		
700	Box Motor	1924	In	U	Baldwin	W-303	L4	68,400	40	1938	Note K
701	"	1904	Ci	U-605	"	W-85	"	60,000	30	1937	" K, L
702-704	"	1924	In	U	"	W-303	"	69,000	40	1939	" K
705	"	1906	B	T-154	Standard	W-333	W-HL	75,100	15		" K
706	"	1903	J	T-126	"	W-303	GE-K64	81,300	15	1939	" K
707	"	1907	Ci	T-131	Baldwin	GE-254A	W-HL	78,560	20	1937	" K
708	"	1907	Ci	T-132	Standard	W-303	W-HL	76,400	20		" K
709	"	1906	J	T-150	"	W-333vd	"	73,900	15		" K
710	"	1932	R	New	"	"	"	87,600			" M, N
711	"			PS-427	Brill	"	"	69,400	20	1940	" K
712	"	1924	A	PS-476	Baldwin	GE-254a	W-HL	84,600			" N, O
713	"	"	A	PS-477	"	"	"	81,920			" N, O
714	"	"	A	PS-478	"	"	"	103,400			" N, O, P
715-717	"	"	A	PS-432 to 434	"	W-333v6	"	88,700	32		" N, Q
718	"	1910	Ci	T-136	Standard	W-303	"	78,000	20	1938	" N, R
719	"	1907	NL	PS-422	Baldwin	GE-205a	GE-K64	66,460	22	1939	" K, S
720	Stock motor	1907	Ni	PS-424	"	GE-205a	"	66,000	20	1939	" K
721	Box-motor			PS-425	"	"	"				" K, T
722	"			PS-426	"	GE-205a	GE-K64	74,240	22	1939	" N, U
723	"	1906	Ci	U-601	"	W-303	L4	68,400	30	1938	" K
724	"	1903	Ci	U-610	Standard	W-303	L4	68,000	30	1938	" K, V
725	"	1900	S	U-612	Baldwin	"	L4	58,000	30	1938	" K, W
726-727	"	1930	Q	I-845-6	"	GE-205b	W-HL	79,000	30		" N
728	"	1910	Ci	I-847	Curtis	GE-205e	L4	80,200	30	1938	" K, X
729	"	1906	Ci	I-852	Baldwin	GE-205b	L4	74,700	30	1939	" N, Y
730	"	1924	Q	I-853	"	"	W-HL	80,800	30		" N, Z
731-732	"	1907	Ci	I-854-5	"	"	L4	74,400	30	1938	" K, AA
733	"	1910	Ci	I-856	Curtis	W-303	L4	80,200	40	1938	" K, BB
734	"	1910	Ci	I-857	"	GE-205b	L4	80,200	40	1939	" K, CC
735-736	"	1917	S	I-858-9	Baldwin	"	W-HL	75,000	30	(735-1938)	" K, DD
737	"		D	D-796	"	W-333vd	W-HL	83,700	30		" N
738	"	1923	A	PS-151	"	GE-254	W-HL	82,200	40		" K, EE
739	Locomotive	1939	R	PS-605	Standard	W-303	W-HL	108,900			" N, FF
740	"	1925	W	PS-606	Baldwin	W-562d5	W-HL	100,000			" N
741	"	1920	T	T-192	Standard	W-333vd	W-HLF	86,530			" N
742	"	1927	T	T-196	"	"	"	89,800			" N
743	"	1918	L	L-402	"	"	W-HL	79,700		1935	" N
744	Line motor	1908	J	U-238	Baldwin	GE-205	GE-K24d	55,000		1938	" N
745	"	1913	T	T-177	Peckham	GE-73	See Note	50,000		Before 1938	" N, GG
746	"	1902	E	T-190	"	"	K-35	50,000		1940	" N, HH
747	"	1902	S	T-191	Baldwin	W-303	K-34d	65,000			" N
748	"	1910		I-823	"	GE-201H	K-6	57,000		1938	" N, II
749	"			I-826	Baldwin	"	"				" JJ
750	"			I-827	Baldwin	"	"				Note JJ
751	"	1929	Q	L-829	"	W-307cv6	K-6a	61,400		1938	" N, KK
752	"	1905	Sm	U-287	"	GE-205	K34d	75,000		1938	" N, LL
753	"	1905	Sm	U-285	"	"	"	75,000		1938	" N, LL
754	"	1913	C	T-181	St Louis	W-93a	GE-M	60,000		1937	" N
755	"	1914		PS-214	Baldwin	GE-205a	GE-K64	47,500		1939	" K, MM
756	"	1925		PS-217	"	GE-205a	W-HL	65,600		1939	" N
757	"	1938	R	718	Standard	W-303	"	78,000			" N, R
758	Work Motor	1918	U	U	Baldwin	W-85	L4	75,000		1938	
759	"	1918	U	U	"	W-303	L4	74,800		1939	
760	"	1908	U	U	"	W-85	L4	60,000		1938	
761	"	1908	U	U	C	GE-57	K14	50,000		1938	
762	"	1926	U	U	Baldwin	GE-205a	L4	64,800		1938	
763	"	1926	U	U	"	GE-205f	L4	76,500		1938	
764	"	1927	U	U	"	W-85	L4	62,300		1937	Note NN
765	"	1927	U	U	"	W-303	L4	63,000			
766	"	1928	U	U	Standard	"	W-HL	104,000			
767	"	1920	T	T-193	Peckham	GE-73	K34d	67,400		1938	
768	"	1923	T	T-195	Baldwin	W-303	K54bra	77,500		1938	
769	"			PS-611	Baldwin	"	"				Note N
770	"	1913		PS-612	St Louis	GE-57h	K14	46,000			Note N
771-795	"			I-818-822	"	"	"			1938	" OO, N
1150	Wreck Motor	1934	R	U-443	"	W-333	W-HL	85,600			" FF, N
1151	"	1922	T	T-152(?)	B'dwin	W-121a	K64bra	65,000			" QQ, R
1152	"	1908	J	PS-149	Standard	"	K64				" RR, Z
1153	"			I	"	"	"			1939	" N
1160	Wreck Trail	1903		U-1150	Arch Bar	trail	none	31,000			
1171	Snow sweeper	1910	C	T-591	C	GE-67	K10	48,000		1938	
1176	Snow plow	1900	T	T-155	Arch Bar	trail	none	28,000		1937	
1177	"	1900	T	T-199	"	"	"	28,000		1938	
1182	City work	1918	B	T-806	Brill	W-506e10	K63br	10,000		1938	
1185	Sand dryer	1912		U-645	Arch Bar	trail	none	32,000			
1188	Portable sub	1922		PS-222	Fox	trail	"	75,000			
1189	"	1920	F	U-1152	Armour	"	"			1938	
158	Pull car	1923	A	PS-158	Baldwin	GE-254	GE-PC	105,000		1939	Note X, SS
171	Work car	1900	G	PS-171	"	"	GE-K35			1939	" N, TT
200-205	City passgr.	1927	K	PS-260-5	Brill	W-510e	W-HL	40,200		1939	" N

Owing to the complexity of this roster extensive use is made of symbols and explanatory reference notes. Each column of the roster is headed by a number and explanation of these columns is given below. Where code letters have been used to save space in these columns they are explained in connection with the respective columns in the notes below.

COLUMN (2)-TYPE CAR. The accommodations of the cars; thus, Obs.-Enclosed observation; bagg. -car with baggage compartment; RPO-Railway Post Office compartment; Line motor - Motorized line car; Work Motor - a handy light locomotive, usually a flat car-with-cab job having one control position in the center of the cab suited to operation in either direction; Wreck car - a tool car for emergency work; Sand Dryer - a car equipped to dry out sand for use on the road; Portable-sub - a sub-station mounted in a car so that it may be moved about to meet temporary power requirements.

COLUMN (4)-BY. The car builder. Table below gives code:		
A - American Car & Foundry Co.	G - Jackson & Sharp Co.	S - St. Louis Car Co.
B - J.G. Brill Co.	IN - Interstate Car Co.	SN - John Stephenson Co.
C - Cummings Car & Coach Co.	J - Jewett Car Co.	U - Union Tr. Co. of Ind. shops
	K - G.C. Kuhlman Co.	W - Baldwin-Westinghouse
CI - Cincinnati Car Co.	L - No. Ind. Power Co. shop	
D - Dayton & Western Tr. Co. shops	MI - Miles Car & Mfg. Co.	
E - A S & I Co. (We cannot verify just what this would mean)	F - Pullman Car & Mfg. Co.	
A - Armour Car Co.	Q - Ind. Serv. Corp. shops	
	R - Indiana R.R. shops	

D - Dayton & Western Traction Co.
I - Indiana Service Corporation.
L - Northern Indiana Power Co.
PS - Public Service Co. of Indiana, successor to Interstate Public Service Company.

N - Northern Indiana Railway, Inc.
T - Terre Haute, Indianapolis & East'n Tr. Co.
U - Union Traction Co. of Indiana

COLUMN (7)-MOTORS.			
GENERAL ELECTRIC TYPES			
GE-57	50 hp.	GE-205	110
57	40	254	145
73	75	275	85
201	55	706	100

WESTINGHOUSE ELEC. & MFG. TYPES			
W-38	75 hp.	W-383	125
93	50	506	25
121	90	510	35
303	110	516	50
307	60	562	100

M - " " " " magnetic contactor.
PC - Automatic accelerated, line energized, camshaft contactors, with field control.
Non-Multiple unit types:
L4, K34, K12, K10, K6 - 4 motor controllers with separate canopy hand operated breakers.
K63 - 2 motor controller as above.
K64, K35 - 4 motor controller usually with special handle to operate magnetic contactor type of line breaker located under car.
K75f - 4 motor controller with separate motor cut-out, line breaker and field taper.

COLUMN (11)-RETIRED. Year last car of group was taken from service. If no date shown cars of this group are still believed in operation.

FF- Car 750 was completely rebuilt in 1939 using only cab of PS-605, which was built about 1910 by General Electric Co - American Loco. Works, and had arch bar trucks, K control.

GG- Car 761 had a K54 controller at one end; an L4 at the other.

HH- Car 762, ex-T 190 came originally from the Indianapolis Crawfordsville & Danville Ry.

II- 1 823 made from Ft Wayne & Northern Indiana Tr. Co. car 42.

JJ- Also place left for these cars in roster they were never used on the system and not remembered.

KK- car I-829 built from salvage of Ft Wayne & Decatur Tr. Co. freight motor 110.

LL- Cars 768 and 769 originally were Indiana Northern Tr. Co. passenger cars.

MM- PS 214 made from Indianapolis Columbus & Southern Tr. Co. 503.

NN- Motor 783 converted later to flat car.

OO- Motors 792-795 remembered but never used on system, hence no data available.

PP- Also not used in revenue service this car retains name "Elwood". See also note H.

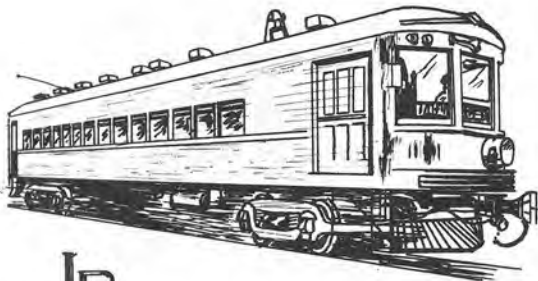
QQ- Motor 1151 originally passenger motor T 79, Jewett built.

RR- Interstate 149 was originally Western Ohio Ry. 198.

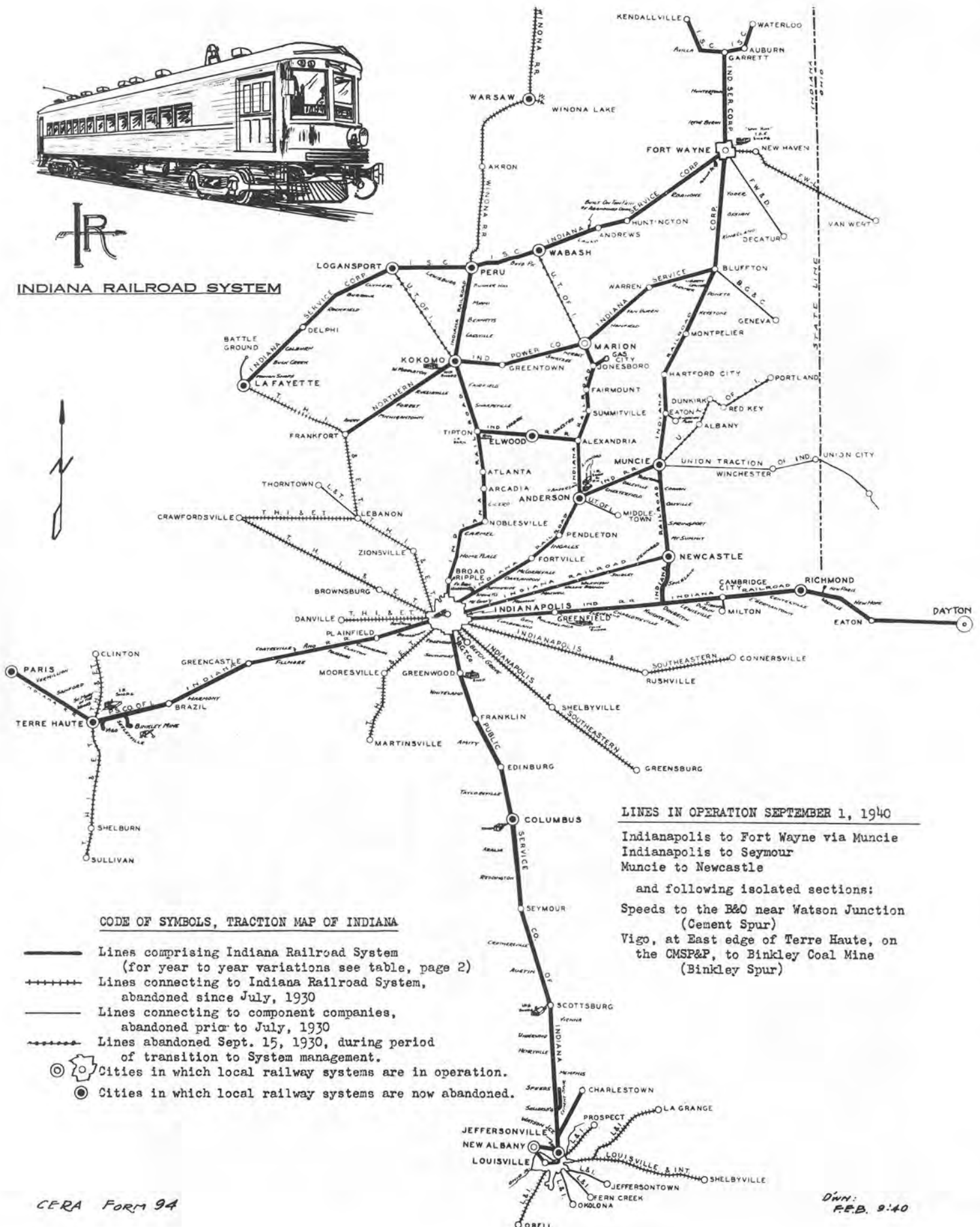
SS- Car 158, carrying interstate lettering, originally a parlor-dining car. Inside fittings were removed, car was fitted with 4 motors, but otherwise unchanged it was used as a locomotive.

TT- Car 171, carrying Public Service Co. of Indiana lettering, formerly a steel sheathed passenger car used on Charlestown branch, then seats removed and used as a work car. Originally built from wood passenger car in 1 series of Indianapolis Shelbyville & Southeastern Tr. Co.

PARDON US - Sorry, we had so much material to put in this, our largest Bulletin yet, that we had to turn the roster reference notes on their side in order to squeeze them in on one page.



INDIANA RAILROAD SYSTEM



CODE OF SYMBOLS, TRACTION MAP OF INDIANA

- Lines comprising Indiana Railroad System (for year to year variations see table, page 2)
- - - Lines connecting to Indiana Railroad System, abandoned since July, 1930
- Lines connecting to component companies, abandoned prior to July, 1930
- Lines abandoned Sept. 15, 1930, during period of transition to System management.
- ⊙ Cities in which local railway systems are in operation.
- ⊗ Cities in which local railway systems are now abandoned.

LINES IN OPERATION SEPTEMBER 1, 1940

Indianapolis to Fort Wayne via Muncie
Indianapolis to Seymour
Muncie to Newcastle

and following isolated sections:

Speeds to the B&O near Watson Junction (Cement Spur)
Vigo, at East edge of Terre Haute, on the CMSP&P, to Binkley Coal Mine (Binkley Spur)