

INCORPORATED UNDER THE LAWS OF THE STATE OF CONNECTICUT.

No. 105

The Meriden and Cromwell Rail Road Company



CAPITAL \$ 300,000.

SHARES \$100 EACH

This Certifies, that _____
is entitled to _____ Shares of the Capital Stock
of THE MERIDEN AND CROMWELL RAIL ROAD COMPANY, transferable only on the books
of said Company in person, or by Attorney, duly authorized on surrender
of this Certificate.

Meriden, Conn. _____ 188__

SECRETARY. PRESIDENT.

INCORPORATED UNDER THE LAWS OF THE STATE OF CONNECTICUT.

No. 532

The Meriden, Waterbury and Connecticut River Rail Road Company



CAPITAL \$ 500,000.

SHARES \$100 EACH

This Certifies, that _____
is entitled to _____ Shares of the Capital Stock
of THE MERIDEN, WATERBURY & CONNECTICUT RIVER RAILROAD COMPANY, transferable only
on the books of the Company in person, or by Attorney, duly authorized on
surrender of this Certificate.

Meriden, Conn. _____ 18__

SECRETARY. PRESIDENT.

Copies of stock certificates of the original and the expanded "Cromwell Road."

ROSTER OF EQUIPMENT

PASSENGER CARS

Car No.	Type	Date Ordered	Builder	Cost
10	Baggage-coach combination	April, 1884	Wason	
11	Baggage-coach combination	Dec. 30, 1887	Pullman	\$3,700
20	Day coach, first class	Dec. 30, 1887	Pullman	\$4,500
21	Day coach, first class	Dec. 30, 1887	Pullman	\$4,500
22	Day coach, first class	Dec. 30, 1887	Pullman	\$4,500
23	Day coach, first class	Dec. 30, 1887	Pullman	\$4,500
	Excursion coach (ex-Philadelphia & Reading No. 12)	(delivered July, 1888)		\$900
	Excursion coach (ex-Philadelphia & Reading No. 344)	(delivered July, 1888)		\$900
	Excursion coach (ex-Philadelphia & Reading No. 360)	(delivered July, 1888)		\$900
	Excursion coach (ex-Chicago & Alton No. 501)	(delivered July, 1888)		\$900

FREIGHT CARS

No of Cars in Lot	Type	Date Ordered	Builder	Price for Lot
1-3-5-7-9	Platform flat cars (\$395 each)	Nov. 1883	Wason	\$2,035
11	Flat cars	June 30, 1884	Wason	\$4,510
4	Flat cars	July 31, 1884	Wason	\$1,640
10	Drop bottom coal cars	Aug. 22, 1884	Wason	\$4,250
8	Drop bottom coal cars	Sept. 9, 1884	Wason	\$3,400
1	22-inch side board coal car	Sept. 15, 1884	Wason	\$425
6	36-inch side board coal cars	Sept. 15, 1884	Wason	\$2,580
6	Box cars	Nov. 5, 1884	Wason	\$2,940
20	34-ft. flat cars with stake pockets	Sept. 23, 1887	Lebanon Mfg. Co.	\$7,000
20	20-ton 30-inch side board coal cars	Dec. 30, 1887	Pullman	each \$367.50
55	20-ton 36-inch side board coal cars	Dec. 30, 1887	Pullman	each \$382.00
10	20-ton box cars	Dec. 30, 1887	Pullman	each \$472.50

Form 1701. 31-288. 1000. M.

CERTIFICATE OF DELIVERY.

I HEREBY CERTIFY that I have this day received from PULLMAN'S PALACE CAR COMPANY, PULLMAN CAR WORKS,

PULLMAN, ILL., at Pullman, Ill.

for account of Meriden and Waterbury R.R.

Cars, lettered, M. W. & Co. R. R. R.

Nov. 131, 133, 135, 137, 139, 141, 143, 145, 147, 149
151, 153, 155, 157, 159, 161, 163, 165, 167, 169
171, 173, 175, 177, 179, 181, 183, 185, 187, 189
191, 193, 195, 197, 199, 201, 203, 205, 207, 209

Pullman Mar 12th 1888 A. L. B. Ord
Inspector for M. W. R. R.

Facsimile of delivery order which gives the numbers of 40 coal cars which were built by Pullman.

ROLLING STOCK NOTES

Five freight cars were ordered, or authorized, in August 1883 when construction first began on the Meriden & Cromwell. Forty freight cars (mostly for coal) and a passenger coach were reportedly ordered from Wason in Springfield in April of 1884. By July of the same year the road had received several cars for use in construction, although track had been laid for only six miles.

Before the Waterbury extension was built, it was estimated that four passenger cars and one combination baggage-coach would be needed; but of those finally obtained, combination car No. 10 was the only one purchased new from Wason in 1884. The Meriden & Cromwell apparently got along with this one car, plus occasional rentals from the Hartford & Connecticut Valley, or some other neighboring road. On opening day two coaches were borrowed in this manner, and cost \$25 — \$12.50 apiece for use and hauling from Hartford to Cromwell and back before and after the opening ceremonies.

The extension to Waterbury called for more cars, and after getting comparative figures from Wason and Pullman, with much correspondence and visiting back and forth, the road made on contract with Pullman on December 30, 1887, for four first class passenger coaches, one combination car and a number of freight cars.

In these days of \$100,000 coaches, it is interesting to note that the best the Pullman Company had to offer came to \$4,500 each, and the combination car cost the railroad only \$3,700.

The equipment register of the New York & New England Railroad in September, 1893, gave a total of 155 freight cars on the Meriden, Waterbury & Connecticut River Railroad as follows:

Nos.	Type	Capacity	No. in Lot
2-36 (even)	Box cars, 30 and 40-ft.	40,000	18
1-5 (odd)	Flat cars	40,000	3
7-77 (odd)	Coal cars	40,000	36
79-89 (odd)	Drop bottom coal cars	40,000	6
91-129 (odd)	Flat cars	40,000	17
131-169 (odd)	Coal cars, 34-ft.	50,000	20
171-279 (odd)	Drop bottom coal cars, 34-ft.	50,000	55

Nos. 7-53 and 57-77 had movable sideboards, No. 55 had a derrick.

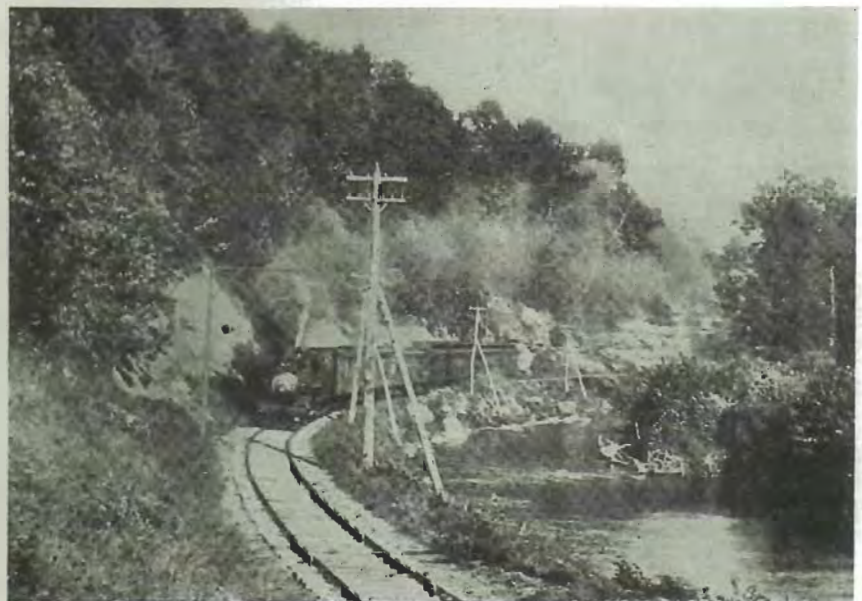
Nos. 97, 111 and 123 were vacant. (Probably scrapped after damage in wrecks).

The new cars were numbered 20, 21, 22, 23; the combine 11. For excursion business the road bought Philadelphia & Reading coaches Nos. 12, 344 and 360, also Chicago & Alton No. 501, from E. H. Wilson & Company of Philadelphia, for \$900 each. These were delivered at the time of the opening of the Waterbury extension, in July of 1888, and probably were in need of shopping, to judge from the references to them in the newspapers. Excursion cars were apparently not supposed

to be much more than transportation in those days.

There were thus 10 passenger cars owned, and the New York & New England evidently absorbed them into its own roster, as they do not appear in any inventory of rolling stock after the NY&NE took over.

Rolling stock of the Meriden, Waterbury & Connecticut River Railroad is said to have been sold to the New Haven Railroad for \$21,444 when taken over from the New York & New England in September, 1897.



WESTBOUND "mixed" train along the Quinnipiac River, South Meriden, in the early 1900's.

ARRIVAL OF THE NEW CARS — ELEGANT SPECIMENS OF CAR MAKERS' ART FROM THE PULLMAN COMPANY

Standing on the sidetrack at the Center Street railroad station are the fine, brand new passenger coaches and one combination passenger and baggage car which are so extraordinarily neat and handsome that they would attract attention among the finest in the country.

They are the luxurious conveyances to be used in transporting humanity over the hill and far away to our sister city Waterbury on the Naugatuck. They arrived this morning (February 14, 1888)—that is, three did—and the remainder came over this afternoon from Cromwell. During the day they have been visited by many stockholders and others interested, and nothing but praise has been heard for the management in providing such handsome coaches.

The cars are painted dark olive green, and the trimmings are finely shown off by bright gold leaf. The length of the cars is a little greater than that of ordinary passenger coaches, and the trucks and running gear are of the the easiest and most serviceable make. The wheels on either end of the car are so set in the bearings as to be farther apart than ordinarily, making the rumbling sound less obnoxious. The jar of the

passenger car is reduced to a minimum by the use of both spiral and elliptical springs as in the very finest drawing room cars. The name at the top covers the entire length, and well it may. Here it is: "Meriden, Waterbury & Connecticut River Railroad Company." The cars are equipped with the most approved Westinghouse air brakes and connections.

Inside the cars present an even more luxurious appearance. The seats, 14 on each side, are of the most comfortable pattern, of the Hale & Kilbourn make, having an extra number of special springs so arranged in wooden frames as to be very durable, not solid stuffed, but open underneath. The arms are of carved cherry, and the sides of the car are of a very pretty cherry finish. The upper and lower decks of the roof have a maple veneer headlining, which are very ornamentally painted. The whole appearance of the interior of the car is very cheerful and light.

The saloons are models of their kind. In the ladies' toilets are arranged wash basins set in dark marble and with water to be pumped from a cistern conveniently located. A large plate glass mirror is also very convenient for the ladies, situated directly over the wash basin.

The heating is by means of the Baker heater, with pipes running the length of the car. This apparatus is so manufactured that the fire is extinguished if anything happens to the heater out of the ordinary course of events. The lighting is by means of three large and beautifully finished chandeliers, situated at equidistant points through the cars. The racks for storing light baggage are of highly polished brass of very pretty design. The cars were built by the Pullman Company at its old works in Detroit, Mich., and are fully up to the high standard set by George M. Pullman.

There are 80 freight cars to come and while it may not be expected that they will be built in the regal splendor of the passenger coaches they will undoubtedly be substantial and models in their line. . .

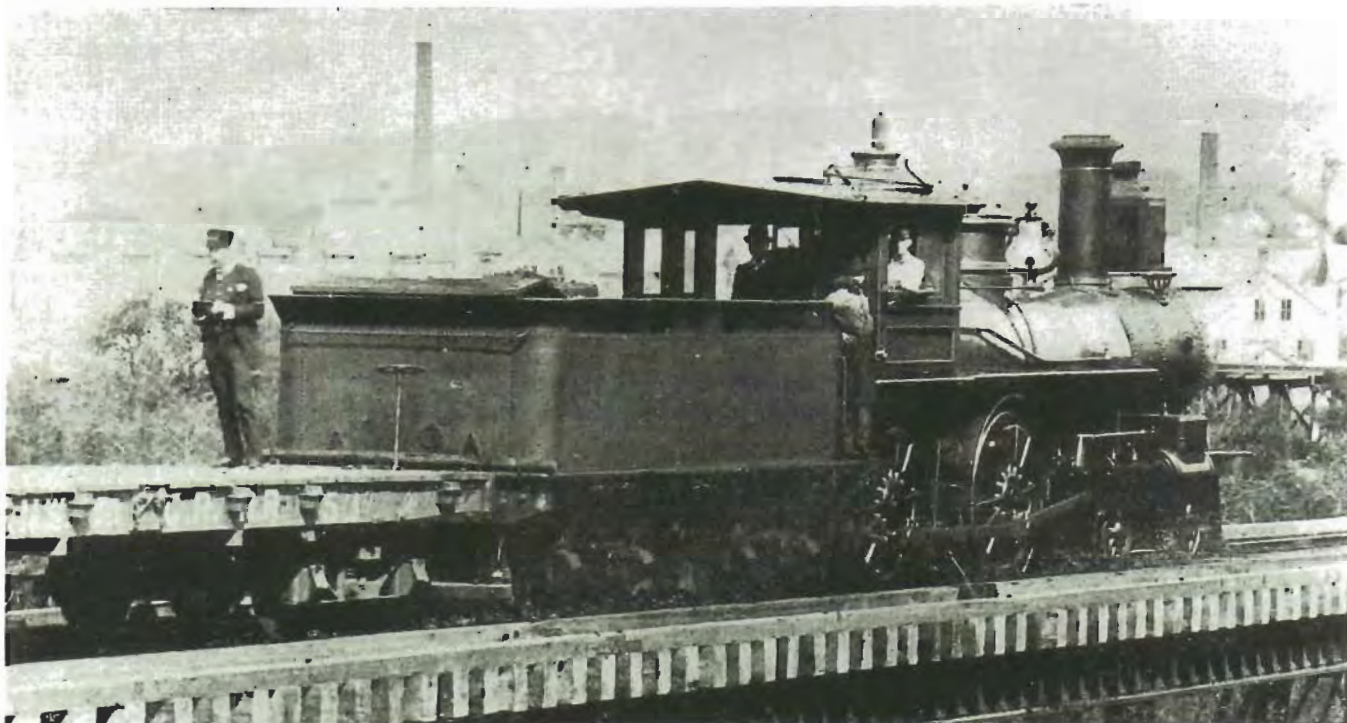
The combination baggage and smoking car is a beauty. It is modeled something after the style of the Boston & Albany smokers, having rattan seats, very durable and still very comfortable. The public will be not be obliged to stand in the baggage compartment while smoking on the new road, as was necessary on the Cromwell.

(Reprinted from the Meriden Journal, Feb. 14, 1888)



—Photo from collection of Glover A. Snow.

ORIGINAL COACH NO. 10, which was built at the Wason shops in Springfield, Mass., is shown after it was repainted in 1888 to match the new coaches bought from Pullman that year when the extension from Meriden to Waterbury was opened. Color was olive green with gold lettering.



NO. 1 as it looked about 1888, headed east on the bridge over the Naugatuck River, Waterbury.

MOTIVE POWER

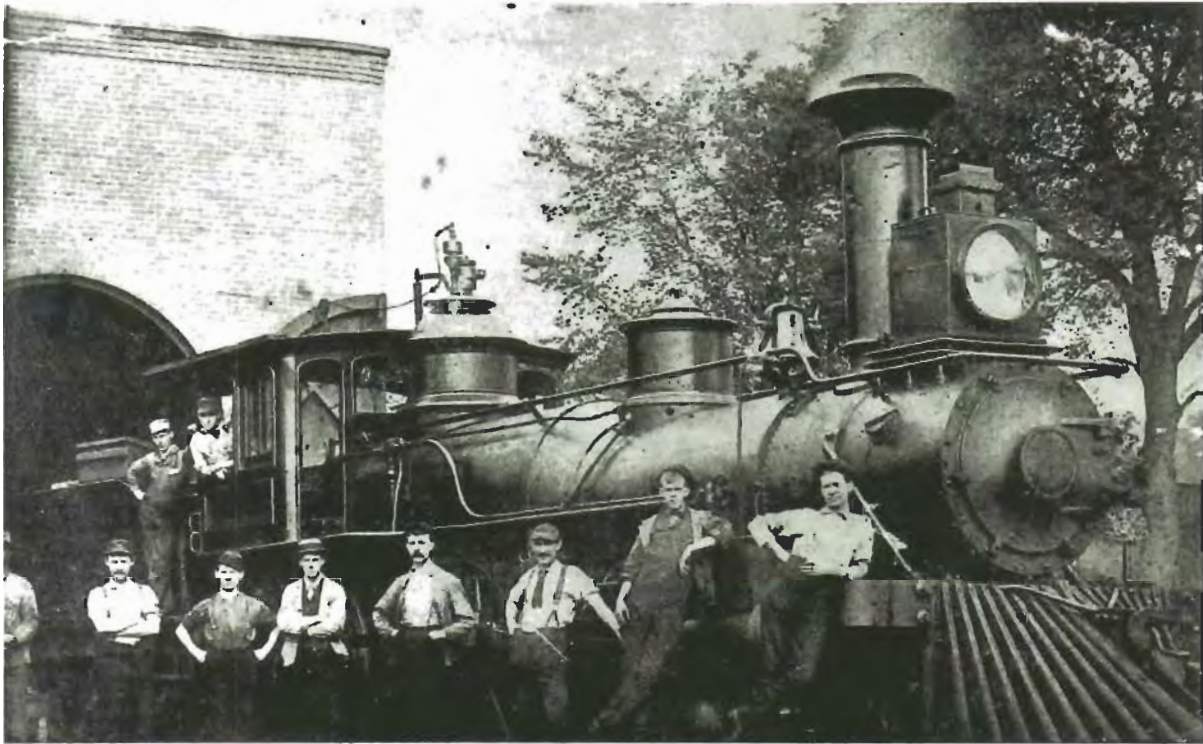
No. 1 In August, 1883, at about the same time that the first grading started on the Meriden & Cromwell, the directors voted to buy their first engine and five cars. The locomotive was built by the Rhode Island Works, Providence, as Meriden & Cromwell No. 1, builder's No. 1372, a 4-4-0 type with 54-inch drivers, cylinders 17x24, weight on drivers 52,000 pounds, total weight 80,000 pounds. The New York & New England gave it No. 198 when it took over. The New Haven when it purchased all the Cromwell engines in 1897 made it their No. 2. In 1904 it was renumbered 1898, and the machine was not scrapped until 1915.

First No. 2 First No. 2 was apparently somewhat of a boomer, and considerably the worse for

wear. A 2-4-0 type, it was built by Baldwin in 1868 as their No. 1761. It had 14x22 cylinders, 50-inch drivers, and it weighed 14½ tons. The Lehigh Coal & Navigation Company was the first owner, and listed it as their No. 54. Eventually it turned up with Philadelphia & Reading markings and their No. 10, on the Wilkesbarre Pier at Providence, working for the Providence & Worcester road. At that time it burned hard coal, had a straight stack and no extension arch. The Rhode Island Locomotive Works billed the Meriden & Cromwell road \$603.59 for repairing it as a construction engine. What the Meriden & Cromwell paid for it "as is" has not been learned. When it came to the Meriden & Cromwell in February, 1885, it had 52-inch drivers and 17x24 cylinders.

Second No. 2 On the first of November, 1886, original No. 2 was traded in for \$800 toward a new Rhode Island Forney at \$6,400. (Compare this with the price tag on the lightest Diesel switcher nowadays — around \$60,000 — or road Diesels at \$200,000!) Second No. 2 with builder's No. 1698, had 44-inch drivers, 17x22 cylinders, and weighed 56,000 pounds. New York & New England gave it No. 199, and on the New Haven its number was 14, which was changed in 1904 to 2826. The engine was scrapped January 29, 1914.

No. 3 Originally a Pennsylvania Railroad machine, various PRR numbers have been claimed for it, but Charles E. Fisher who has done exhaustive checking of many road lists, including the



—Photo from collection of Glover A. Snow.

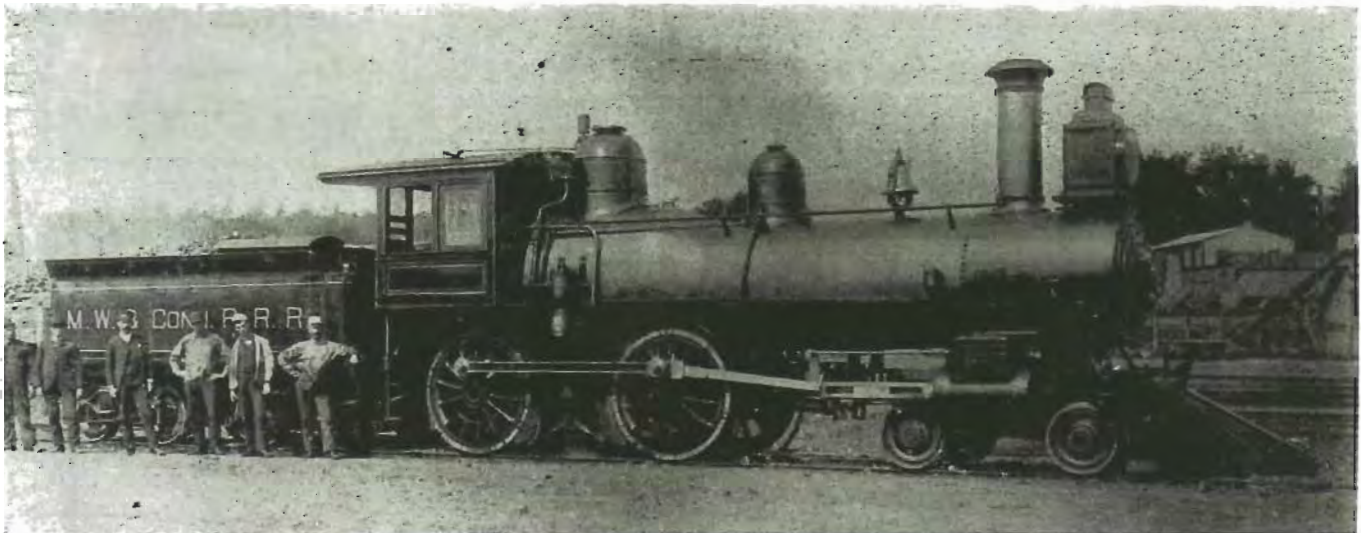
NO. 3 at the West Main Street engine house, Meriden. Photograph is believed to have been taken in the Fall of 1892 when No. 3 had its last overhaul by the MW&CR shop crew.

Meriden, Waterbury & Connecticut River, is convinced No. 3 was PRR No. 387, built by Baldwin in 1867, a 4-4-0 with 17x24 cylinders and 62-inch drivers, weight on drivers of 50,400 pounds, and weight of engine 75,700 pounds.

The other PRR numbers alleged for this machine have proved to have been used on locomotives of other wheel arrangement, or made and used by the PRR at times which would not have allowed them to have been sold to the

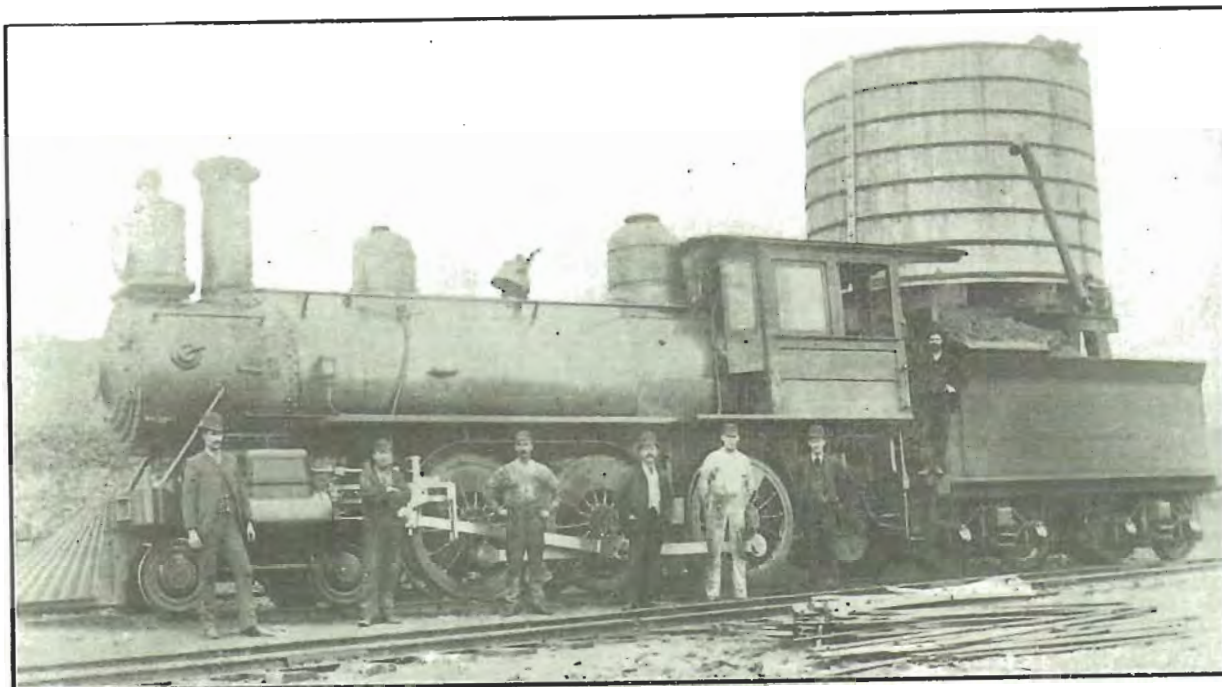
Meriden & Cromwell when it is known the engine was obtained.

The picture shows No. 3 to be of unmistakable Pennsylvania origin, but it did not come directly to the Meriden & Cromwell. It was purchased on October 6, 1887, for \$2,000



—Photo from collection of Connecticut Valley Chapter, N. R. H. S.

NO. 4 photographed at Meriden when new in 1888. Crew members identified are: third from left, William Varson, conductor; fifth from left, John Kline, fireman; Penrose H. Baker, engineer.



—From collection of D. W. Peckham.

No. 5 of the Meriden, Waterbury & Connecticut River Railroad photographed at Summit.

from a man in New York who had it stored at the Mason Machine Works in Taunton, Mass., under the name of the Standard Coal Company of Boston. Engineer Gilbert went to Taunton and brought it home via the New York & New England from Walpole to Hartford, thence down the Valley Road to Cromwell. The freight bill said it weighed 80,000 pounds "on drivers."

In February of 1889 it was reported that No. 3 had been thoroughly overhauled under the supervision of Master Mechanic Wilkinson, "and is now in regular service doing good work."

No. 3 took New York & New England No 200 — at least it was assigned, although it may never have been used, as most reports rated No. 3 ready for scrap at the time of the lease. It was still in storage, however, when the equipment was sold to the New Haven Road in 1897.

No. 4 A 4-4-0, which was built in Schenectady in 1888, builder's No. 2695, it had 54-inch drivers, 17x24 cylinders, weighed 60,000 pounds on drivers, 32,000 pounds on trucks. It received NY&NE No. 201, and New Haven No. 151, renumbered to 1849 in 1904. It was scrapped in 1917.

No. 5 The road's only six-coupled machine, a 4-6-0, it had 17x24 cylinders, 48-inch drivers, weighed 80,000 pounds thereon and 18,000 pounds on trucks, was built in 1888 as Schenectady No. 2741. It was said to have proven too heavy for the Waterbury line.

The New York & New England gave it number 202, and the New Haven turned it over to the Shepaug, Litchfield & Northern, which made it their No. 2. When the New Haven took it back they assigned No. 552, then 452 and finally 929 to the engine. It was scrapped

in 1922, the last MW&CR locomotive to pound the rails.

American Locomotive Company records on Nos. 4 and 5 are slightly at variance with our figures on one or two points. No. 4, according to Alco, was of 90,000 weight on drivers and had 60-inch wheels when it left Schenectady. No. 5, Alco says, weighed 101,000 pounds and had 55-inch wheels, with cylinders 19x24. Quite possibly alterations were made on these engines. In June 1897 the New Haven Road superintendent listed No. 4 as having 63-inch wheels, but he listed No. 5 as having 55-inch.

All five engines seem to have stayed on the property during the New York & New England lease. They were stored in Meriden when service ceased on June 1, 1896. The New Haven took them in September, 1897, and when the line reopened in 1898, it was with New Haven power.

NEW HAVEN ROAD RE-TRIES AN OLD IDEA TO

Restore Train Service To Abandoned Lines



TWO PT-boat type diesel engines, suspended at a 30-degree angle, were explained by Roy A. Norris, diesel expert (left) to Jim Evans of Windham Observer and Register's W. E. L. Lush.

THERE may be nothing new under the sun—but a novel twist to an idea the New Haven Railroad first tried 55 years ago—is not only paying off. It is restoring passenger train service to lines entirely killed off by intruders of the automobile. More than that, rail officials are hopeful it may reverse the downward spiral of rail travel in effect since 1920.

Some of the best features of the automobile and the World War II PT boat have blended into the new Budd-built RDC's (rail diesel cars), eight of which are in operation now; six more are on order, some of which may provide passenger service on the Naugatuck Division come winter.

Railroad men have to have a colorful name for every new train or type of service. Zephyr, Rocket, Comet or Mainliner—they call the New Haven's new stainless steel 30-minute-an-hour speedsters "the Shoreliners." Who? We dunno, (he operates on the Norwich branch, connecting Worcester and New London. Another, providing the shortest rail route in Boston via Williamette leaves Hartford over the peaceful, picturesque, pastoral Highland division. Maybe the others do run to New Bedford or Cape Cod or some line that entitles them to be called Shoreliners. We'll settle for RDB's (Rusk Dumaine's Beauties).

A year ago Frederic C. Dumaine Jr., shortly after becoming president of the New Haven, told Norwich businessmen he hoped to restore passenger service on the Norwich branch, which, except for the State of Maine Express, had seen no passenger trains since 1928. Even the State of Maine rumbled through there in the small hours of even, unseen, until in 1946 it was re-routed via Providence.

FULFILLS PROMISE

On June he made good on the promise. Now a "Shoreliner" makes two round trips daily between New London and Worcester, connecting with the Mayflower and other fast trains. So well has the service been received, it is building not only through passenger but intermediate traffic.

Seating 300-passengers, the "Shoreliner" is a locomotive-propelled air-conditioned coach powered by two 275-horsepower

General Motors diesel engines which are identical to those used by PT boats during the last war. Located beneath the floor, these engines operate through torque converters and drive one axle of either truck. The car is capable of a top speed of 43 miles per hour, cruises at 30 miles per hour, and will reach a speed of 44 miles per hour in one minute from a standing start—which is about four times the acceleration of a standard train.

USED IN MULTIPLE

The "Shoreliner" can be driven from either end by one operator using simple controls. It requires only a two-man crew of an engineer and a conductor. If necessary it can be coupled to other similar cars to form a train of two or more cars, in which instance each car provides its own power. It does not have the necessary power to haul a trailer car and maintain the necessary speed to make schedules. But coupled to other similar cars each car does its share of the job.

The new cars have the same attractive appearance as the New Haven's famous stainless steel streamline cars, being built of the same metal which possesses three times the strength of ordinary steel.

One of the important new developments incorporated in the "Shoreliners" is an entirely new type of "disc" brakes which are claimed to represent the most substantial development in railroad brakes since the invention of the air brake. They enable the car to be brought to a complete stop, smooth and effortless stop.

Bright cheerful interiors, double-glazed picture windows, fluorescent lighting, air-conditioning, electric water coolers, rubber tile floors and sound deadening are among the features of the "Shoreliners" and special springs insure exceptionally comfortable riding qualities.

There is also the "Little Shoreliner," in operation in the Boston area, which looks for all the world like a bus on rails. Where the "Shoreliners" are known technically as RDC's, the black-bull "Little Shoreliner" has been named the JED because Frederic C. Dumaine, the elder, was very much interested in its development. Seating 45 persons, its interior as well as exterior has much the



REBURECING passenger business for the New Haven, eight of these Budd RDCs are in operation, six more to be added shortly.

appearance of a modern bus. The comfortable seats have stainless steel frames, robe rails, arm rests and foot rests.

INSULATED WHEELS

As contrasted with the "Shoreliners" which have direct diesel drive, the "Little Shoreliner" has a supercharged six-cylinder diesel engine located at the rear, with each rail-truck equipped with two General Electric 55-horsepower motors for the actual transmission of power. The wheels are rubber-insulated for quiet running and it attains a maximum speed of 54 miles an hour.

It is interesting in connection with these newly developed cars to look back upon some of the previous efforts to solve the vexing problem of light-density passenger traffic. One of the earliest such efforts dates away back to the last century, when the Schenectady Locomotive Works built a "steam coach" for the New Haven Railroad. This was a railroad coach in one end of which there was a steam engine built right into the car. It was used on the line between Dedham, Mass., and Islington Junction, a two-mile route connecting with main-line trains. That line was discontinued in 1904.

Years later, in 1936, the New Haven again experimented with a similar type of train, taking two old coaches and remodeling them into a two-car streamlined train in one car of which was a high-pressure steam engine for its propulsion. It was painted blue, silver and gray and came to be familiarly known along the Naugatuck Valley as "the Blue Goose." It ran for several years between Bridgeport, Waterbury and Hartford, but too many mechanical difficulties were encountered and the experiment finally was abandoned.

BUS ON RAIL

In the meantime, back in the early 1920's, attempts were made to adapt automotive operation to the rails. The New Haven's first experiment along these lines was "Car No. 9008" which was a rather crude-looking bus with flanged wheels, with regular automotive drive. This type of car went through a stage of development and experimentation which used the gasoline engine to operate a dynamo for the creation of electricity to run the train, much similar to the present-day use of diesel power. They met with some success, but finally fell by the wayside.

In 1935 the New Haven



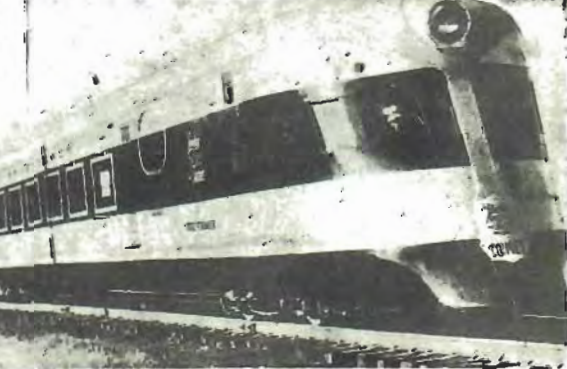
NEW Haven's first try at single-unit self-propelled car, built in 1897. A combination car and steam engine, it ran between Dedham, Mass., and Islington Junction, until 1904.



IN 1926 when revenues sagged, N. H. Road tried this vehicle with Mack motor and Brill body for passenger-baggage service. It lacked comfort but provided research for later models.



THEN came a full-sized rail coach, run by gasoline engine which generated electricity for its actual propulsion, much as today's diesel-electric engines function. It, too, had 'bugs'.



NOW at Readville Shops in the junkyard. The Comet was built in 1935 by Goodyear-Zeppelin, ran in Boston area and was suc-





bought a three-car streamline articulated diesel-powered train, "The Comet," built by the Goodyear-Zeppelin Company at Akron, Ohio. This first ran between Providence and Boston and later was tried on a number of other runs, including the Waterbury-Hartford-Boston run via the "Highland" route. It was successful as a business getter, but it was a "headache" to the mechanical forces because it was the only one of its kind on the system and any time anything went wrong with it, it was a special job to fix it up. It was finally taken out of service permanently within the past year.

All of these various experiments, though, were attempts to solve the basic problem of trying to make passenger service pay on lines where the traffic is light. It looks now as though the solution has been found, and that the "Shoreliners" and the "Little Shoreliners" are the answers to the long sought question.

The six additional "Shoreliners" now on order will be assigned to the road's Naugatuck Valley line, according to present plans, for the run between Bridgeport, Waterbury and Winsted. This line has long been a "problem child" for the New Haven passenger-wise, and the recent shifting of mail carryings from railroad to truck have brought this passenger service very close to the margin where it is possible to operate at a profit. But with "Shoreliners" to take over the job, the road expects it will be able to continue to keep the line "in the black" and perhaps even to build it up to something of its old-time prestige.

Photos and article reprinted from
New Haven Register, Sunday, August 3, 1952.

Passenger Train Service RESTORED ON THE Worcester-New London Line



NEW SELF-PROPELLED "SHORELINER" RAIL DIESEL CAR, all stainless steel and air-conditioned, the type to be operated by The New Haven Railroad between WORCESTER and NEW LONDON.

To meet the demand for PASSENGER SERVICE to and from NEW YORK, THE NEW HAVEN RAILROAD will operate regular service on the WORCESTER-NEW LONDON Line, DAILY EXCEPT SUNDAYS, starting MONDAY, JUNE 9, 1952.

At NEW LONDON connections will be made with either the fast "MAYFLOWER" Express or the famous "MERCHANTS LIMITED", both to and from NEW YORK.

Passenger Train Schedule

(Daily Except Sundays)
Daylight Saving Time

From Worcester to New London - New York

	A.M.	P.M.
Lv. WORCESTER	7:50	4:50
WEBSTER	8:13	5:13
PUTNAM	8:28	5:28
Lv. DANIELSON	8:39	5:39
NORWICH	9:16	6:16
Due NEW LONDON	9:37	6:37
Lv. NEW LONDON	9(c)46	6(c)46
Due NEW HAVEN	10(c)37	7(c)37
Due NEW YORK (G.C.T.)	12(c)00	9(c)00
	noon	P.M.

From New York - New London to Worcester

	A.M.	P.M.
Lv. NEW YORK (G.C.T.)	7(c)30	5(c)00
Lv. NEW HAVEN	8(c)52	6(c)22
Due NEW LONDON	9(c)43	7(c)13
Lv. NEW LONDON	9:53	7:23
Due NORWICH	10:14	7:44
DANIELSON	10:51	8:21
PUTNAM	11:02	8:32
WEBSTER	11:17	8:47
Due WORCESTER	11:40	9:10
	A.M.	P.M.

(c) By connecting train between New London and New York.
Dining service available between New London and New York.

Passenger Fares, Incl. Federal Tax

	Coach Fares Only			Coach Fares Only	
	One Way	Round Trip 14-Day		One Way	Round Trip 14-Day
WORCESTER and:			PUTNAM and:		
WEBSTER	\$0.69	\$1.22	DANIELSON	\$0.35	\$0.60
PUTNAM	1.06	1.89	NORWICH	1.35	2.39
DANIELSON	1.35	2.39	NEW LONDON	1.86	3.31
NORWICH	2.33	4.14	NEW YORK	6.60	11.73
NEW LONDON	2.79	4.97			
NEW YORK	7.36	13.09	DANIELSON and:		
			NORWICH	\$0.95	\$1.70
WEBSTER and:			NEW LONDON	1.55	2.76
PUTNAM	\$0.35	\$0.60	NEW YORK	6.29	11.18
DANIELSON	.78	1.38			
NORWICH	1.71	3.04	NORWICH and:		
NEW LONDON	2.25	4.00	NEW LONDON	\$0.59	\$1.04
NEW YORK	6.99	12.42	NEW YORK	5.36	9.52

Children under 5 from under 12 half fare.

It will be necessary for passengers from Webster and Danielson to pay fares on the train.
FOR PARLOR CAR, COMMUTATION and all other TYPES OF PASSENGER FARES CONSULT
YOUR LOCAL AGENT

YOUR PATRONAGE WILL JUSTIFY THE CONTINUANCE
OF THIS SERVICE.



PHOTOGRAPH BY P. H. H. 1952-11

What Is RDC? 'New Haven' Wins 2nd FRP Award

(From a Budd Company brochure)

RDC stands for Rail Diesel Car. It is the all-stainless steel, self-propelled railway passenger car created by The Budd Company and introduced to the railroad world in September, 1949.

The need for such a car has always been recognized in this country. RDC is the only one ever built which not only meets that need adequately, but also provides such performance that it has widened to almost limitless horizons the field of usefulness for self-propelled cars.

Fundamental in the success of RDC is its high power-weight ratio of 8.68 horsepower per ton. RDC-1 weighs 112,800 pounds ready to run.

The car is powered by two 275-horsepower General Motors diesel engine power units which are mounted under the floor, so that there is no intrusion upon revenue space. Each engine drives one axle, providing independent action and notably increased traction. The power is transmitted by a General Motors torque converter and reverse gear built integral with the engine.

The trucks are equipped with Budd railway disc brakes, Budd Rolokron anti-wheel-slide devices and sanding applied both automatically and manually, and a shunt-block system which insures positive single-car actuation of signals and crossing gates.

RDC is air-conditioned, and is heated by what would otherwise be waste heat from the power unit cooling system.

Cost-per-mile naturally varies with the type of service, so there can be no fixed figure applicable to all RDC operations, but a typical example is found in a breakdown of actual operating experience over an 8-months' period, showing an operating cost of 64 cents per car mile.

RDC accelerates to 57 mph in one mile; to 44 mph in 60 seconds. From a standing start it will do 5 miles in 5 minutes.

The 1952 Passenger Service Progress Award of the Federation for Railway Progress went to the New York, New Haven & Hartford Railroad, which also received the award in 1949. An example of the improvements in passenger service which makes the New Haven outstanding in the country is shown below in the comparison of the April 30, 1952, Providence-Worcester service in Table 23 with that of April 26, 1953, in Table 14 at bottom of the page:

Providence-Worcester 23

Miles	Ex Sun	Sun only	Sat only	Ex Sat Sun & Hol A	Miles	Ex Sun & Hol A	Daily	Ex Sun & Hol A
	124	126	578	576		125	575	
0.0 Providence.....Lv	AM 1 14	AM 2 35	PM 3 40	PM 4 42	0.0 Worcester.....Lv	AM 2 10	AM 6 22	
4.5 Pawtucket and Central Falls.....			3 49	4 51	5.9 Millbury.....		6 33	
5.9 Valley Falls.....			3 53	4 55	8.5 Wilkinsonville.....		6 38	
8.6 Berkeley.....			3 58	5 00	9.2 Saundersville.....		6 40	
9.2 Ashton.....			4 01	5 03	10.6 Farnumville.....		6 43	
10.7 Albion.....			4 04	5 06	12.6 Northbridge.....		6 47	
12.2 Manville.....			4 07	5 09	16.9 Whitins.....		6 53	
15.8 Woonsocket.....			4 12	5 14	16.9 Uxbridge.....		7 00	
17.5 Blackstone.....			4 32	5 44	18.9 Millville.....		7 05	
19.7 Millville.....			4 36	5 48	23.5 Blackstone.....		7 12	
24.3 Uxbridge.....			4 41	5 53	27.4 Woonsocket.....		7 17	
26.3 Whitins.....			4 50	6 02	27.4 Manville.....		7 21	
26.3 Northbridge.....			4 54	6 08	31.0 Albion.....		7 35	
30.6 Farnumville.....			5 04	6 16	32.5 Northbridge.....		7 41	
32.6 Saundersville.....			5 13	6 25	34.0 Berkeley.....		7 45	
34.0 Wilkinonville.....			5 18	6 30	34.0 Valley Falls.....		7 49	
37.3 Pawtucket and Central Falls.....			5 21	6 33	37.3 Pawtucket and Central Falls.....		7 51	
37.3 Millbury.....			5 23	6 35	38.7 Pawtucket and Central Falls.....		7 58	
43.2 Worcester.....	AM 2 24	AM 3 45	PM 5 42	PM 6 54	43.2 Providence.....	AM 3 20	AM 8 15	AM 8 15

e Leave Attleboro 8.42 PM; Pawtucket-Central Falls 9.12 PM.
 g Leave Mansfield 8.26 PM, Attleboro 8.03 PM; Pawtucket-Central Falls 9.27 PM.
 f Stops only on signal or on notice to conductor.
 y Will carry checked baggage only on Saturdays.

◆◆ SHORELINER—Rail diesel car.
 ▼♥ LITTLE SHORELINER—F. C. D. Car.
 ◆ No checked baggage service on this train.
 Holiday A—May 30, July 4 and Sept. 7.
 Holiday B—May 30 and July 4.
 Holiday C—Sept. 7.
 a Leave Attleboro 12.21 PM.
 b Leave Attleboro 5.38 PM; Pawtucket-Central Falls, 5.59 PM.
 c Stops only on Saturdays, at East Foxboro 2.01 PM.
 f Stops only on signal or on notice to Conductor.
 g Leave Pawtucket-Central Falls 8.50 PM.
 v Stops only to receive passengers.
 x Leave Woonsocket 4.22 PM.
 y Will carry checked baggage only on Saturdays and Sundays.
 z Leave Woonsocket 6.50 PM.

4-26-53-29

Providence-Worcester

14

Miles	Ex Sun	Sun only	Ex Sat Sun & Hol C	Ex Sat Sun & Hol C	Sat only Ex Hol B	Ex Sat Sun & Hol C	Ex Sat Sun & Hol C	Miles	Daily	Ex Sun & Hol A	Ex Sat Sun & Hol C	Ex Sat Sun & Hol C	Ex Sat Sun & Hol C
	124	126	582	◆584	578	◆586	576		125	575	◆581	◆583	585
0.0 Providence.....Lv	AM 1 04	AM 2 51	AM 8 50	PM 1 50	PM 3 40	PM 4 07	PM 6 08	0.0 Worcester.....Lv	AM 2 10	AM 6 35	AM 9 00	PM 12 35	PM 4 18
4.5 Pawtucket and Central Falls.....					3 49	4 15	6 18	6.0 Millbury.....		6 48			
5.9 Valley Falls.....			8 53	1 58	3 53	4 15	6 21	8.6 Wilkinsonville.....		6 53			
8.6 Berkeley.....					3 58		6 26	9.3 Saundersville.....		6 55			
9.2 Ashton.....					4 01		6 29	10.7 Farnumville.....		6 58			
10.7 Albion.....					4 04		6 32	12.7 Northbridge.....		7 02			
12.2 Manville.....					4 07		6 35	17.0 Whitins.....		7 12			
15.8 Woonsocket.....			9 17	2 15	4x12	4 32	6:40	19.0 Uxbridge.....		7 18	9 29	1 04	4 47
17.5 Blackstone.....			9 21	2 19	4 26	4 36	6 54	23.6 Millville.....		7 25			
19.7 Millville.....					4 31		6 58	25.8 Blackstone.....		7 30	9 40	1 15	5 09
24.3 Uxbridge.....			9 35	2 30	4 40	4 53	7 05	27.5 Woonsocket.....		7 41	9 45	1 21	5 14
26.3 Whitins.....					4 44		7 09	31.1 Manville.....		7 47			
30.6 Northbridge.....					4 53		7 12	32.6 Albion.....		7 50			
32.6 Farnumville.....					4 58		7 16	34.1 Ashton.....		7 53			
34.0 Saundersville.....								34.7 Berkeley.....		7 55			
34.7 Wilkinonville.....					5 03		7 31	37.4 Valley Falls.....		8 02			
37.3 Pawtucket and Central Falls.....					5 10		7 38	38.8 Pawtucket and Central Falls.....					
43.3 Worcester.....	AM 2 13	AM 4 01	AM 10 02	PM 2 57	PM 5 22	PM 5 21	PM 7 51	43.3 Providence.....	AM 3 20	AM 8 07	AM 10 02	PM 1 38	PM 5 31

Modern, Expanded Passenger Service Pays Off

The 'New Haven' Leads Again



The New York, New Haven & Hartford Railroad is quietly going ahead with a program of improved and expanded passenger service, and is finding that it pays off in dollars and cents.

The New Haven's progressive and streamlined management holds no brief with the popular conception in railroad circles that the short-haul passenger traffic should be discouraged and abandoned. The addition of 50 trains, mostly in the Boston area, with the change from Daylight to Standard Time on September 23, 1952, was so successful that 20 more trains were added two months later in November. Most of these runs were 35 miles or less.

Although not the first railroad in the country to use the Budd RDC, the New Haven is now the largest user in the country. The road finds the RDC ("Shoreliner" on the New Haven) the ideal car for short-haul, lightly traveled runs. And where volume of travel will not warrant an 89-passen-

ger vehicle, the New Haven is pioneering with its "F.C.D. Car" or "Little Shoreliner." It is a standard Mack 50-passenger bus body mounted on P.C.C. trucks and driven by Diesel-electric power.

A pioneering move with the RDC was the reopening of the passenger service on the New London-Worcester route. Originally started on June 9, 1952, for a 3-months' trial period, the daily service of two round trips immediately became popular. Connecting with the Mayflower and the Merchants Limited to and from New York, it gives Worcester 4¼-4½-hour train service to New York for the first time in history.

One thing that surprised the New Haven management on reopening the New London-Worcester service was the amount of revenue received from purely local riders. The number of passengers carried between Worcester and Webster, for instance, was quite a revelation. Offtimes 25 or 30 people would take the 16-mile ride on shopping or business trips into the bigger city. More than once the conductor has had to ask the engineer to run slow in order

that he could collect all the fares.

So good was the local riding that stops were added at Jewett City and Plainfield, Conn., when the Fall timetable appeared in 1952, as well as a third round trip daily. Needless to say, bus travel in the New London-Worcester area has fallen off alarmingly.

The addition of one round trip, known as "The Nutmegger," between Hartford and Boston on a 2-hour, 40-minute schedule has proven successful. Now operated with a "Shoreliner," the train has been more than filled at times. For instance, Friday, November 29, the day after Thanksgiving (1952), there were 136 passengers to take the 89-capacity unit out of Boston. A second RDC was hurriedly coupled and at Hartford it was necessary to round up a crew to send the car back to Boston immediately to protect the Saturday morning runs for which it was scheduled.

From 4 train departures daily in 1949 to 12 daily in 1952 (14 daily in 1953 with the Summer-only "East Wind") is what the new and improved passenger service has done for Putnam, Conn. — three trains each way on week days and two on Sundays on the Hartford-Boston line, and the same schedule on the New London-Worcester line.

A SCHEDULE in the New Haven's April 26, 1953, timetable which hasn't appeared for the preceding two decades—an example of the expanded passenger service.

7 New York—New London—Norwich—Worcester

Change Trains at New London
Service between New London and Worcester is provided by a SHORELINER rail diesel car

Miles from New London	Station	Ex Sun	Sun only	DAILY	Ex Sun	DAILY	Miles	Station	Sun only	Ex Sun	Ex Sun	DAILY	DAILY
6	New York, G.C.T. Lv	7:30	8:03	10:30	12:00	5:00	0.0	Worcester.....Lv	7:30	7:49	12:15	2:03	4:58
13.5	New Haven.....Duc	8:52	9:34	11:30	1:27	6:22	16.0	Webster.....Lv	7:54	8:12	12:39	2:27	5:18
23.1	New London...Duc	9:43	10:34		2:25	7:13	26.0	Putnam.....Lv	8:09	8:27	12:54	2:46	5:34
Change Trains													
0	New London...Lv	9:51	10:43		2:35	7:21	33.9	Danielson.....Lv	8:20	8:38	1:05	2:46	5:45
13.5	Norwich.....Duc	10:12	11:06		2:56	7:42	42.9	Plainfield.....Lv	8:32	8:50	1:17	2:46	5:57
23.1	Jewett City.....Duc	10:31	11:25		3:15	8:01	49.2	Jewett City.....Lv	8:41	8:59	1:26	2:46	6:06
29.4	Plainfield.....Duc	10:40	11:34		3:24	8:10	53.8	Norwich.....Lv	9:00	9:18	1:45	2:46	6:25
38.4	Danielson.....Duc	10:52	11:46		3:36	8:22	72.3	New London...Duc	9:21	9:39	2:06		6:46
46.3	Putnam.....Duc	11:03	11:57		3:47	8:33	Change Trains						
56.3	Webster.....Duc	11:19	12:12		4:02	8:48	72.3	New London...Lv	9:30	9:51	2:12	6:51	
72.3	Worcester.....Duc	11:43	12:36		4:26	9:12	123.1	New Haven...Duc	10:25	10:42	3:07	7:42	
East Wind, Via Hartford, Conn. East Wind, Via Hartford, Conn. First trip June 26 Last trip Sept. 12 First trip June 27 Last trip Sept. 13													

Additional train service and restorations on other branches awaited delivery of new equipment when 1952 drew to a close. At the year's end only 8 RDC's and one F.C.D. were in service. On order were 32 more RDC's (types 1, 2, 3 and 4—the first baggage-express-RPO units to be built); 9 F.C.D. Mack cars; 100 multiple-unit electric coaches for the New Haven-New York commuter service and 10 electric passenger locomotives (this electric equipment for 1954 delivery).

If the new equipment continues to make money for the road, the management sees no end to the added volume of business to be gained by even further expansion of service.

Substantial investments are being made not only in passenger rolling stock, but in all departments. The physical equipment of the railroad is in better shape than it ever was. New rail, ballasting and general roadbed improvements are keeping large crews continuously employed. The paint and car repair shops are working full time to keep rolling stock in first class condition. In the words of its energetic president, Frederic C. Dumaine, Jr., "We intend to make the New Haven Railroad the most modern railroad in the country. That's what New England deserves and if we give that kind of service the New Haven Railroad will make money."

In the financial reports, the place where this method of running a railroad contrary to ultra-conservative principles, and where management's policies are approved or disapproved in the long run, the New Haven shows a very healthy condition. For the year 1952 the New Haven carried 43,616,463 revenue passengers, or 1,372,173 more than in 1951. Passenger revenue was \$51,677,012, or \$2,410,704 more than in 1951, and it amounted to 31.62% of the New Haven's total gross income for 1952.

Freight revenue amounted to \$93,529,505, up 1.8% over 1951, while total operating income was \$163,419,622. Total net income was \$6,677,225.



NEW HAVEN ROAD'S RDC No. 22, regularly used on the "Nutmegger," Hartford to Boston weekday run, poses for a photo on old Central New England trackage at site of former roundhouse, West Winsted, Conn., on a Connecticut Valley Chapter, NRHS railfan trip, Sunday, February 1, 1953.