REPORT COVERING INSPECTION, MADE AT BLUEFIELD, W. VA., MAY 7 AND 8, 1940, OF P.S.E.X. HOPPER CARS 0139, 0160, 0162, 0175, 0195, 0197, 0207, 0219, 0228, 0238, 0263, 0271, 0281, 0294, 0300, 0358, 0367, 0532, 0533, AND 0556, OFFERED FOR SALE TO THE ALASKA RAILROAD BY IRON & STEEL PRODUCTS, INCORPORATED.

#### General Construction:

Built new in March and April 1921 by Standard Steel Car Company, Butler, Pa.

Type: All steel twin hopper.

Capacity: 110,000 lbs. 1880 cubic feet.

Light Weight: 38,400 to 39,300 lbs.

#### General Dimensions:

Length over striking castings, 31 feet 11 inches.

Inside clear length, 30 feet 6 inches.

Width over side top angles, 10 feet 3-3/8 inches.

Width over side stakes, 10 feet 3-3/8 inches.

Inside clear width, 9 feet  $5\frac{1}{2}$  inches.

Height from rail to center of drawbar, 2 feet 102 inches.

Height from rail to top of sides and ends, 10 feet, 8 inches.

#### Center Sills:

Consist of two (2) 12-inch shipbuilding channels extending full length of car, top cover plated from end to end. Bottom flange of center sills reinforced from the ends to a point 50 inches back of body bolsters by rolled angles  $3\frac{1}{2}$  by 4 inches securely riveted to sills.

#### Draft Sills:

Formed by center sills.

# End Sills:

Nine-inch rolled channels extending full width of car over

side sills. End sills are provided at center with a cast steel combined striking plate and carrier iron, and at ends with malleable iron push-pole pockets.

# Body Bolsters:

Built up of 1-inch steel plates and angles. Web plates extends across car, and upper edge is flanged and riveted to floor sheets; reinforced by steel plates and shapes riveted to both web plate and floor sheet. Web plate connected to center sills and side of car by angles extending full depth of web. Bottom flange angle of bolster is connected to bottom flange of side sill by means of steel gussett plates. Bottom cover steel plate passing under the center sills and riveted to same and to bolster bottom flange angles. Bolsters are provided with body center plate, center filler and side bearings all riveted in place.

#### Diagonal Braces:

Each corner of car is braced by rolled steel channels extending from body bolster at center sill to corner of side and end sills, riveted in place.

# Cross Ridge:

One per car located at center of car between the hopper doors, extending from side sheet to side sheet and connected to same by means of rolled angles.

# Longitudinal Hood:

Two per car steel plates, located over the center sills and extending from sloping floor sheet to cross ridge, flanged at ends and riveted in place.

#### Hoppers:

Two (2) per car.

#### Hopper Doors:

Four (4) per car, steel plates, hung from top and equipped with two stiffener channels riveted to bottom edge of each part of doors, to which connection is made with operating device. Doors are operated from one side of car worked by means of Symington operating devices.

#### End Slope Floor:

Composed of steel plates at each end of car placed at an angle of about 30 degrees, lap spliced to steel center floor plate, flanged and riveted to side sheets, and stiffened by rolled steel angles riveted in place.

# Inside Hopper Sheet:

Four (4) per car, steel plates, riveted to center sills and flanged to take sloping floor sheet.

#### Outside Hopper Sheet:

Four (4) per car, steel plates, flanged and riveted to side sills, bottom angle, and sloping floor sheet.

#### Sides:

Formed by steel plates, side stakes, top bulb angle, and side sills.

#### Side Sills:

Nine-inch channels extending full length of car riveted in place.

#### Side Stakes:

Fourteen (14) per car, seven (7) on each side, pressed steel, extending from top chord to side sill.

# Inside Splice Plates:

Side sheets are spliced at stakes and riveted to side stakes and side sheets on inside of car.

#### Corner Posts:

 $3\frac{1}{2}$  by  $3\frac{1}{2}$ -inch rolled steel angles extending from top cord angles to bottom of sills, and riveted in place.

#### Side Sheet Ties:

Three (3) per car, pressed steel forms, riveted to side sheets and stakes.

#### End Sheets:

Steel plates, flanged at bottom to take the sloping floor sheet, and riveted to end top chord, corner posts, and floor sheets.

#### End Top Chord:

Rolled steel bulb angle extending full width of car, riveted to end sheet and top corner gussetts.

# End Posts:

Two (2) 6-inch channels each end extending from end sills to end sheets riveted in place.

#### Inside Steps:

-Car is provided with 3 on each end sheet.

# Safety Appliances:

Conform to standards for this type of car.

#### Hand Brakes:

Shaft and wheel. Plate A.

# Air Brakes:

Westinghouse 10-inch equipment K2 triples. Fittings standard.

#### Draft Gears:

Friction type. National M-16 and Miner A-2NW.

#### Couplers:

A.R.A. Type D. 6 by 8 shank with top rotary operating crelease levers.

### Coupler Yokes:

Wrought steel, Horizontal cross keys.

#### Trucks:

50-ton cast steel trucks. Gauge, 4 feet  $8\frac{1}{2}$  inches. Wheel base, 5 feet 6 inches.

#### Wheels:

Multiple-wear steel wheels, 33 inches.

#### Axles:

A.R.A. Standard. Journals,  $5\frac{1}{2}$  by 10 inches.

#### Side Frames:

Cast steel side frames, integral box type with integral brake hanger brackets, Bettendorf U type.

### Truck Bolsters:

Cast steel box type equipped with dead lever stop bracket and Stucki side bearings.

### Truck Springs:

A.A.R. four (4) double coils per cluster.

# Spring Planks:

Pressed steel, flared.

# Journal Bearings and Wedges:

A.A.R. Standard for  $5\frac{1}{2}$  by 10 journals.

# Brake Beams:

A.A.R. No. 2 plus, inside hung, equipped with safety supports and bottom rod supports.

#### Brake Shoes:

Cast iron reinforced steel backs.

#### Dust Guards:

Standard for  $5\frac{1}{2}$  by 10 journals.

#### Oil and Waste:

Wool sponging.

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Our inspection disclosed that these cars are in regular service on the line of the Norfolk and Western Railroad, and are being well maintained.

The bodies are straight and in good alignment, and their general appearance is good. The underframes appear to be in good general condition with no indication of weakness or excessive corrosion.

The trucks are in good general condition with no apparent welds or evidence of failure in any of the major parts. The wheels have good flanges and contours, and average about one and one half  $(1\frac{1}{2})$  inch of service metal per wheel.

The air brakes, foundation brake rigging, brake beams, and connections were all in good condition.

The side and end sheets, slope and floor sheets, hopper sheets, and hopper doors all appear to be in good condition. Hopper doors all fit tight.

Couplers, draft gears, and striking castings all appear to be in good condition.

Car 0281 has a broken body center plate, and body center plate rivets are loose on all the cars. Car 0358 had several rivets missing at body bolster angle plate. Car 0195 had a cracked hand brake rod, and car 0175 has a missing sheave wheel on hand brake rod.

Mr. C. W. Benz, representing the Iron and Steel Products, Inc., accompanied us on this inspection and informed us that he had made arrangements with the Norfolk and Western Railroad Company to make the above repairs before the cars left Bluefield, W. Va.

In our opinion, if the cars were painted inside and outside, trucks included, their value would be enhanced. In this connection, Mr. Bonz advises that paint can be taken care of at small additional cost at this point before cars are shipped.

Thomas F. Carey Co., Inc., 120 Liberty Street, New York, New York.

Centlemen:

Attention: Mr. T. E. Knox

Your letter of May 8 regarding coaches and baggage cars has been received.

We succeeded in securing two CRIAP seventy foot coaches through the Iron and Steel Products, Inc. but we are still in the market for two or three seventy foot baggage cars.

The price of \$6,500 each for the Lehigh Valley sixty foot baggage cars offered by Major Jones is. in my mind. rather high. If the sixty-three foot baggage cars you state that you have been able to find will cost almost twice the amount for which you offer the Lehigh Valley cars, I do not believe we will be able to do any business.

Could you tell me where I could get a look at the Lehigh Valley baggage cars and if close to New York perhaps I could run over either Saturday this week or Monday of next week.

Very truly yours.

O. F. CHLSCN General Manager The Alaska Reilroad

# UNITED STATES DEPARTMENT OF THE INTERIOR

OFFICE OF THE SECRETARY

DIVISION OF TERRITORIES AND ISLAND POSSESSIONS

WASHINGTON

OHLSON Br. 682

DIVISION OF TERRITORIES AND ISLAND POSSESSIONS

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VIA RADIO-ROUTINE

WASHINGTON, D. C. MAY 7, 1940

UMMEL

FEDERAL OFFICE BUILDING SEATTLE VASHINGTON

MAKE AWARD IRON AND STEEL PRODUCT INC IMMEDIATE DELIVERY CHICAGO FOUR REFRIGERATOR
CARS FIFTEEN NAUGHT EIGHT FIFTEEN TWELVE FIFTEEN THIRTEEN AND TWENTY CHE NAUGHT
SEVEN BEBUILT IN NINETEEN THIRTY SIX INSPECTED BY ICC INSPECTORS LAST WERE AND
PRONOUNCED GOOD CONDITION STOP THESE CARS MAY BE USED FOR LOAD CHICAGO TO SEATTLE
SAVING TRANSPORTATION CHARGES OF ABOUT TWO HUNDRED SIXTY DOLLARS PER CAR STOP
INSPECTION WAS ALSO MADE OF SIMILAR TYPE CAP AT DOCUMENT NOT CONTROL BY CAREY
COMPANY BUT INSPECTORS STATED THAT THESE CARS WERE ABOUT READY FOR GENERAL REPAIRS
STOP ALSO MAKE AWARD IRON AND STEEL PRODUCTS INC IMMEDIATE DELIVERY CHICAGO TWO
CRIAP COACHES NUMBERS TWENTY EIGHT TWENTY NINE AND TWENTY EIGHT THIRTY THREE
INSPECTED BY ICC INSPECTORS

OHLSON

REPORT COVERING INSPECTION AT CHICAGO, ILLINOIS, APRIL 30, 1940, OF TWO PASSENGER COACHES OFFERED FOR SALE TO THE ALASKA RAILROAD BY THE IRON AND STEEL PRODUCTS, INC.

# General Construction:

Built new in 1910 by American Car & Foundry Co.

#### Construction:

All steel body steel plate riveted.

#### Length Over Body:

70 feet. Actual body does not include vestibules.

#### Length Over All:

79 feet, 3 3/4 inches.

# Width Over Eaves:

10 feet, 3 inches.

#### Height Over All:

14 feet.

#### Weight:

138.900 lbs.

# Distance Between Truck Centers:

64 feet, 7 inches.

# Trucks:

Commonwealth all steel 6 wheel single brake.

#### Axle Wheels:

A. A. R. standard 5"X9" Journals. 36" multiple wear steel wheels.

#### Center Sills:

Box type continuous 10 inch 35 lb. beams reinforced and spaced by separators, cover plated and riveted.

#### Draft Gears:

Waugh-Gould.

#### Couplers:

Sharon undercut. Operated from both sides.

#### Vestibules:

Pullman wide. Wood side door, steel traps and tail gates, three stand buffers, and diaphragms, three metal steps.

#### Air Brakes:

L3 triple - 16" X 12".

# Train Signal:

Westinghouse.

#### Hand Brake:

Lindstrom ratchet type each end.

### Heating System:

Multiple control. Chicago - vapor. 2" valves with metallic connectors.

#### Lighting System:

Electric Axle light system.

Car 2829 - 4 KW body hung generator. Car 2833 - 4 KW truck hung generator.

Exide batteries - 4 sets of batteries per car - 4 batteries per set.

Car 2829 - 10 lights in center ceiling, one in each end compartment. One in each toilet and one over each trap door in vestibule ceiling.

Car 2833 - 11 bracket lamps on each side of ceiling over seats, 5 lights in center of ceiling, 1 in each end compartment, 1 in each toilet, and 1 over each trap door in the vestibule ceiling.

#### Toilets:

Two (2) one each end. Flush type, overhead water tanks.

#### Wash Basins:

One in each toilet room.

# Interior Finish:

Steel finish up to belt rail, with wood panel up to top of window sash and agasote in lower roof panel and ceiling. Mahogany and ivory paint finish.

#### Seats:

38 Reversible walkover type and 4 fixed seats in main body of car. 1 fixed seat each end compartment. Seating capacity 88 persons.

#### Upholstery:

Green plush.

#### Parcel Racks:

Metal racks. 10 on each side.

# Drinking Water:

2 water coolers and 2 cup machines, one each end of car.

#### Floor:

Composite floor cement.

# Windows:

Double sash. Wood, transoms over windows have frosted glass.

#### Curtains:

Pantasote roller type.

# Ventilation:

4 ventilators each side. 1 eleven in. oscilating fan each end.

#### Insulation:

Hair felt.

# Safety Appliances:

Conform to standard for this type of car.

Our inspection disclosed that these cars are in reasonably good condition considering their age of thirty (30) years. They are now in regular passenger train service on the Chicago, Rock Island & Pacific Railroad.

The bodies are straight and in good alignment and the general appearance is fairly good. The underframes appear to be in good general condition with no indication of weakness or excessive corrosion.

The trucks are in good general condition with no apparent welds and on evidence of failure in any of the major sections of the truck frames. The journal boxes, pedastals, equalizers, springs and truck hangers were all in serviceable condition, with a varying amount of wear on wheels.

The air brakes, foundation brake rigging, brake beams and connections were all in good condition and appear to be well maintained. Some of the outside window sash have bean reinforced at the joints and at the bottom rails with metal plates. All the outside sash should be painted,

The outside body paint which is olive green, is faded and worn to some extent, but there is no evidence of corrosion or pitting. The metal roofs should be painted soon.

The seats and upholstery on same are in fairly good condition, and the same is true of the doors, toilets; hoppers, wash basins and other fixtures.

The interior finish in car 2829 is in good condition and in 2833 the ceiling and head lining had just been repainted.

Floors in each car should be repainted.

These cars appear to be in a reasonably good condition, and with ordinary maintenance should render good service for several years.

Interstate Commerce Commission

BUREAU OF SAFETY

**Mashington** 

IN REPLY ADDRESS
INTERSTATE COMMERCE COMMISSION
BUREAU OF SAPETY

FILE NO.

May 4, 1940.

Mrs. Ruth Hampton, Acting Director, Division of Territories and Island Possessions, Department, of the Interior,

Dear Mrs. Hampton:

Reference is made to your letter of April 22, and our reply of April 23, concerning inspection of various cars, purchase of which is contemplated by the Alaska Railroad.

You are respectfully advised that cars specified in your letter have been inspected by representatives of this Bureau, and you will find attached hereto detailed reports concerning the condition of the refrigerator cars offered for sale by the Thomas F. Carey Co., Inc., and by Iron & Steel Products, Inc. In comparing the condition of the lots of refrigerator cars mentioned above, our representatives made the following statement:

"After inspection of refrigerator cars offered by Thos. F. Carey Company, and Iron & Steel Products, Inc., we are of the opinion that the cars offered by Iron & Steel Products, Inc., are superior to those offered by the Thos. F. Carey Company.

"The cars offered by Iron & Steel Products, Inc., were all rebuilt in 1936 and are in very good condition, whereas those offered by Thos. F. Carey Company were rebuilt in 1922 and 1923, were last in for heavy repairs in 1928 and 1930, and are now about ready for general repairs."

With reference to the 20 hopper-bottom coal cars offered for sale by the Haffner-Thrall Car Company, Chicago, Ill., our representatives state that the car which was submitted to them for inspection was stripped for repairs, and since the

price quoted to the Alaska Railroad by the car company included the cost of repairs, a report concerning the cars in their present state would be of no value. Such inspection as was possible disclosed that the car had good center sill and underframe construction, and that the trucks were equipped with steel trucksides.

In addition to the cars mentioned in your letter, inspection of two baggage cars, two passenger coaches, and 20 hopper-bottom coal cars offered for sale by Iron & Steel Products, Inc., was requested by Colonel Ohlson. The baggage cars and coaches were inspected in Chicago by our representatives, but as yet we have not been advised concerning the point at which the coal cars may be inspected. A detailed report concerning the condition of the coaches is attached hereto, but with regard to the baggage cars, we are advised by our representatives that the cars offered as baggage cars are in reality Arms Yeager horse cars. These cars resemble baggage cars, but they have 16 openings, 28" wide by 20" high, on each side of the car, and two similar openings in each of the four side doors of the car. These openings are not provided with glass, but are equipped with bars and wire. These cars are rough-lined inside and are not provided with lighting or heating apparatus, or other features usually found in baggage cars. They are 75' 8" long, buffer to buffer, with steel underframe, wood body, and canvas roof which shows evidence of leakage. They are in need of considerable repair in addition to the general alteration that would be necessary in order to convert them to baggage service, and it was the opinion of our inspectors that the total expense involved would not be justified by the construction and the condition of the cars.

When inspection of the coal cars has been completed, a detailed report concerning their condition will be forwarded to you.

Respectfully,

Director.

J.M. Mill

REPORT COVERING INSPECTION, MADE AT CHICAGO, ILL., APRIL 29, 1940, OF S.L.&U. REFRIGERATOR CARS 1508, 1512, 1513, AND 2107, OFFERED FOR SALE TO THE ALASKA RAILROAD, BY IRON & STEEL PRODUCTS, INC.

#### General Construction:

2107 built new in 1913; others in 1914, by A.C.&F. Co. All rebuilt in 1936 by Armour Co.

#### Construction:

Steel underframe, wood body. Underframe built up structural.

#### Capacity:

80,000 lbs. 2042 Cubic feet.

#### Weight:

1508 - 56,200 lbs. 1512 - 57,000 lbs. 1513 - 56,200 lbs. 2107 - 54,900 lbs.

#### Outside Dimensions:

Outside length, 40 feet 10 inches. Length over striking castings, 41 feet 8 inches. Width at eaves, 9 feet 9 inches. Height at eaves, 12 feet 9 inches.

#### Inside Dimensions:

Inside length, 33 feet 5 inches between ice tanks. Inside length between lining, 39 feet 11 inches. Inside width, 8 feet 3 inches. Inside height, 7 feet 5 inches.

#### Underframe:

Center Sills: Two (2) twenty-four-inch fish Belly. Cover plated Two (2) ten-inch cast steel short draft arms riveted to center sill sections with a reinforcing plate extending 28 inches back of body bolsters.

#### End Sills:

10-inch channel.

#### Side Sills:

10-inch channel.

#### Needle Beams:

Two (2) per side and six (6) channel underframe cross ties.

#### Diagonal Braces:

Two (2) at each end from center sills to body bolsters.

#### Body Bolster:

Built up structural steel.

#### Draft Gears:

Miner - Sessions - Westinghouse - Farlow.

#### Coupler:

Type D. Shank, 5 by 7 inches.

#### Coupler Yokes:

Cast steel except 1508, which is wrought steel. Horizontal draft keys.

#### Air Brakes:

Westinghouse 10-inch K2 triples with standard fittings.

#### Hand Brakes:

Plate A. Shaft and wheel.

#### Ice Tanks:

One each end. Height, 6 feet 2 inches. Ice Capacity, 225.3 cubic feet. Crushed, 9,668 lbs. Chunk, 9,000 lbs.

#### Hatch Covers:

Ventilated type with hinged blocks. Standard hatch plugs with canvas edges.

#### Roof:

Inside wood, outside metal.

#### Insulation:

Hair felt and Flax-li-num.

#### Floor Racks:

Permanent floor racks.

# Side Doors:

Width, 4 feet. Height, 5 feet 9-7/8 inches. Miner door attachments.

#### Trucks:

Cast steel side frames. Vulcan type except 1515, which has Bettendorf type.
Truck bolsters: Simplex, except 1513, which has cast steel bolster.
Channel spring planks.
Coil truck springs, 4 per cluster
Brake beams, No. 2 plus is equipped with safety supports.
Wheels, 33-inch cast iron single plate 700 lbs.
Axles, A.A.R. Standard. Journals, 5 by 9 inches.

#### Safety Appliances:

Standard to this type of car.

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Our inspection disclosed that these cars are in reasonably good condition, considering their age of 26 years.

They were rebuilt in 1936 and appear to have been well maintained.

The bodies are straight and in good alignment. The underframes are in good general condition with no indication of weakness or corrosion. The trucks are in good general condition with no visible welds; the journal boxes and brake rigging are in good condition. Air brakes are in good condition, but need periodical cleaning and testing. Metal roofs are in good condition but should be painted. The siding appears to be in good condition except for three decayed boards on car 1512. The side doors appear to be in good condition and close tightly. The canvas at the bottom of one door on right side of car 1508 was torn at the bottom. Inspection was made from inside cars with doors closed and hatch plugs in, and no light was visible. Floors and floor racks are in good condition. The inside lining is in good

condition, and ceilings in fair condition. Top corner moulding is missing completely in car 1513. Ice tanks and bulkheads are in good condition. The plugs and hatches are in good condition except torn canvas on one hatch plug on car 1512, and two broken boards on hatch cover on same car. The running boards are in fair condition except for a few decayed saddles and running boards. Body bolsters on both ends of cars 1508 and 1512 were cracked but had been patched with plate steel riveted to each side of web; they showed no signs of sagging. Car 1512 has a broken coupler side wall on the A-end; there were also two brake beam safety supports missing on A-end of this car. The body paint on cars is in fair condition. The journal boxes should be repacked.

\* \* \*

IRON & STEEL RAILS STORAGE TANKS

MACHINERY

AIR MAIL

THE PROPERTY OF COACHES

BUYERS SELLERS TRADERS

"IRONSTEEL"

"Anything containing IRON or STEEL

CHICAGO, (HEGEWISCH STATION) ILL. May 1, 1940

FREIGHT CAR REPAIR PARTS

The Alaska Railroad FREIGHT CARS

Colonel O. F. Ohlson, Gen. Mgr.

c/o U. S. Department of the Interior PASSENGER CARS

Washington, D. C.

LOCOMOTIVES and TENDERS

LOCOMOTIVE CRANES and WORK EQUIPMENT

SUBJECT: Passenger Coaches

CRANES: Overhead and Gantry

STEEL BUILDINGS

BRIDGES TURNTABLES

TANKS: Storage

MOTORS

GENERATORS

TURBINES

DIESEL ENGINES

MACHINERY and EQUIPMENT

MERCHANT IRON

WIRE SHORTS

SURPLUS and **OBSOLETE STOCKS** 

RAILS and ACCESSORIES

ABANDONED PLANTS

and RAILWAYS

SCRAP IRON and STEEL

ft-7

enc - spec.

Dear Colonel Ohlson:

Supplementing our letter of yesterday, wish to advise Messrs. Tonkin and Brown inspected the passenger coaches, and as we told you, they are 70' cars and am sure their report will cover this and all other details. Am quite certain that you will find they were impressed with the condition and general arrangement of these cars. They looked at cars 2829 and 2833 and you will probably see their report, perhaps by the time this letter reaches you.

As these are really fine cars, I trust that your people will see their way clear to purchase them, because they are priced very reasonably.

For your information, I am enclosing a cony of the specifications covering the two particular cars mentioned above.

Very truly yours,

Secretary

A M Blackol

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IRON AND STEEL PRODUCTS, INC.

CHICAGO, Hegewisch Sta., Ill.

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# GENERAL DATA:

BUILT NEW - A. C. & F., 1910 WEIGHT - 138,900 lbs.

SEATING CAPACITY - 88 persons

WOMEN AND MEN'S WASHROOM - One (1) each end

GAR - ONE COMPARTMENT, OR STRAIGHT COACH TYPE

Seating capacity - 88 persons

Vestibule partition each end

#### DIMENSIONS: (Both Cars)

| Length inside                  | 6914"     |
|--------------------------------|-----------|
| Width inside                   | 912-5/8"  |
| Length over-all (coupled)      | 7913-3/4" |
| Length over corner posts       | 7011"     |
| Width over sides               | 10'3"     |
| Height over roof (clear story) | 1410"     |
| Truck Centers                  | 54'1"     |
| Wheel Base (6 wheel truck)     | 10'6"     |
| Wheel Base Over-all            | 6417"     |

#### TRUCKS:

All Steel Commonwealth - - 5 x 9" Journals 6 Wheel Truck - Multiple Wear 36" Dia. Steel Wheels 2" x 6" Equalizers

#### UNDERFRAME:

Continuous Center Sill - Box Type - made up of 2, 10"-35# beams - Reinforced and spaced by separators, coverplated and riveted.

Side Sills - 4" x 6" x 1/2" Angle tied in and riveted to end sill and built up bolsters, crossbearers and needle beams - - The whole comprising a sturdy underframe.

# DRAFT GEAR:

Waugh P.C. Type

SPECIFICATIONS FOR ALL STEEL COMPARTMENT PASSENGER COACHES

COUPLERS - - - - Sharon P. T. Underlift operated from both sides.

#### SIDES:

Consisting of below belt rail panel. Double riveted belt rail. Belt rail panel and letter board all of steel. Riveted.

#### ENDS:

Regulation Safety Steel Ends.

#### ROOF:

All Steel - Riveted - Clear Story Type withUtility Ventilators 5 each side.

#### INTERIOR:

Steel finish up to belt rail and with wood panel up to top of window sash, and agasote in the lower roof panel and ceiling. Double sash. The interior is finished mahogany with cream finish.

#### FLOOR:

Composite floor cement.

#### CHAIRS:

44 Seats arranged 2-2 or total of 88 person seating capacity. Chairs are plush finish - Walkover Type - Reversible 38 Reversible seat - 4 end seats Stationary - 2 compartment seats Stationary.

#### HEAT:

Multiple Control. Chicago-Vapor 2" End Valve - 2" Metallic Connectors.

# ELECTRICITY:

Suspended 4 KW - Generator and also Edison "A" Batteries. 4 Sets of batteries per car (4 Batteries per set). 5 Ceiling lights - 22 (11 each side) aisle lights, or 10 Ceiling Lights - Washroom and Vestibule Lights - 1 over each trap door.

WATER: Drinking water fountain - 1 each end - Dayton Watercoolers.

WASHROOM - Wash basin and flush hopper in each toiletroom.

AIR BRAKE - 18" x 12" with L-3 Triple Valve 1-1/4" Train Line 3/4" Signal Line