

Railcarbus
Trailer!

417

Anchorage, Alaska,
March 25th, 1936.

COLONEL O. F. OHLSON:

I have read the letter written by the Kalamazoo Railway Supply Company dated February 27th relative proposed passenger trailer to haul behind the Kalamazoo "Railcarbus", and I note they state that the weight of the trailer will be in excess of what the 5½" x 35" pneumatic tires are designed for and that you could not expect the full life of the tire if they were used under full capacity load the majority of the time. In view of this fact and the Kalamazoo Company's recommendation that the same size and type of wheel be used on this passenger trailer as is at present under the freight trailer, I would also think that this is the best solution, as there will be several advantages in using the cushion type of wheel as they suggest.

It is nearly \$600.00 cheaper per trailer to start with. There would be no blow-outs or trouble due to air pressure in the ordinary pneumatic tires, no changing of wheels or tires on the road, and I do not believe there would be any objection account of noise as they would be superior to the solid tire wheels as used on the 112, 113 and 116, and which are also used on streetcars in the States.

I would not suggest moving the seats together closer and leaving out some of the space in the vestibule at the front of the trailer in order to shorten the wheel base, as there is hardly as much room now between the seats in the proposed trailer as in the present "Railcarbus", so that it would not be advisable to move them any closer together. It would not seem advisable to eliminate any of the room in the front end of the trailer as there is only 4' now between the front edge of the front seat and the inside of the front wall, which is not very much room to store much luggage if the car is anywhere near filled with passengers.

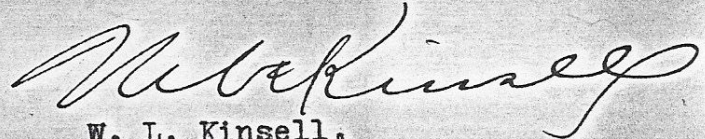
With this space of 4' there would be room enough so that if it is desired to run the trailer late in the fall or early in the spring a coal stove could be installed in the center of the car in the front end close to the front wall, leaving enough room for passengers to get in and out; but probably the car would not be used in weather that would require the car to be heated.

The wheel base could probably be shortened slightly, if necessary, by moving the rear wheels forward, although this would throw a slight more load on the rear wheels; but with Timken bearings and axle heavy enough I do not think there will

Page 2 - O. F. Ohlson
March 25th, 1936.

be any objection to this. I think we could probably make this a 12' wheel base trailer, and with the steel tire cushioned wheels there should not be the objection to the tire binding against the rail on a curve that there would be with the rubber tire, as the adhesion would not be nearly as much between the steel tire and steel rails as between the rubber and steel rails, causing binding on sharp curves. By using the smaller cushion tire wheels they would get away from cutting up into the floor of the car for clearance over the wheels.

There is no mention made of any means of communicating between the trainmen in the trailer and in the "Railcarbus". It might be advisable to have some kind of a signal so that the one in charge of the trailer can signal the motorman to stop in case of emergency or if passengers want to get off at the next station.



W. L. Kinsell,
Sup't. Motive Power & Equipment.

WLK:S

GENERAL OFFICES:
ANCHORAGE, ALASKA

SEATTLE OFFICE:
441 FEDERAL BUILDING

UNITED STATES
DEPARTMENT OF THE INTERIOR

THE ALASKA RAILROAD

OFFICE OF
GENERAL FREIGHT, PASSENGER, AND IMMIGRATION AGENT
SUITE 321-2, 333 NORTH MICHIGAN AVENUE
CHICAGO, ILLINOIS

TELEPHONE, STATE 5798

2 March, 1936

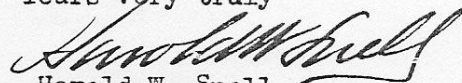
Colonel O. F. Ohlson
441 Federal Bldg.
Seattle, Washington

Dear Colonel:

In accordance with your wire, I
am enclosing your file which you handed me
in Seattle on the Kalamazoo motor equipment;
~~and I am also enclosing letters, specifications
and prints submitted by the Kalamazoo Railway
Supply Company.~~

I have marked in red some of the
paragraphs which should receive special
attention regarding tires and wheels.

Yours very truly



Harold W. Snell

General F. P. & I. Agent

Encs.
am

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Anchorage--December 30, 1935.

MR. W. L. KINSELL:

Your letter October 31st with enclosure concerning the motor equipment recently purchased from the Hillsboro & North Eastern Railroad.

The entire file was forwarded to Mr. Snell, Chicago, with request that he obtain the necessary information as set forth in your letter from the Kalamazoo Railway Supply Company, and copies of Mr. Snell's answer of December 13th, as well as a letter from the Kalamazoo Railway Supply Company, are attached hereto; but you will note that Mr. Snell failed to obtain any cost price or even mention the passenger trailer unit.

You should, however, proceed to assemble all necessary supplies for the enlargement of seating capacity of the motor unit, as outlined in your plan, and do the necessary work so that this unit will be ready to operate in the spring. In the meantime I am requesting Mr. Snell to get the figure on the passenger trailer unit.

O. F. Ohlson,
General Manager.

Enc.

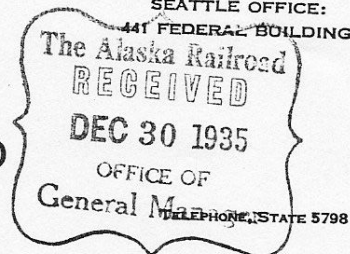
GENERAL OFFICES:
ANCHORAGE, ALASKA

UNITED STATES
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THE ALASKA RAILROAD

OFFICE OF
GENERAL FREIGHT, PASSENGER, AND IMMIGRATION AGENT
SUITE 321-2, 333 NORTH MICHIGAN AVENUE
CHICAGO, ILLINOIS

SEATTLE OFFICE:
441 FEDERAL BUILDING



13 December, 1935

Colonel O. F. Ohlson
General Manager
The Alaska Railroad
Anchorage, Alaska

Dear Colonel Ohlson:

I am returning your file on the motor equipment and trailer, purchased from the Hillsboro & North Eastern Railroad, together with a letter from the Kalamazoo Railway Supply Company, giving prices on the list of material which you listed. I am returning the entire file, because I notice you have sent me the original correspondence between Mr. Kinsell and yourself, and assume that you may need it in studying this matter.

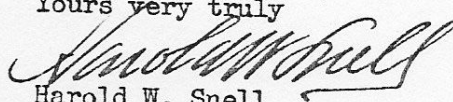
I am retaining a copy of the Kalamazoo Railway Supply Company's letter, should you desire to make reference to it by radio or correspondence. This letter seems to give all the information you desired, with the exception of the four curtains and tie backs for two windows. I believe that if a sample of these curtains were supplied one of the stores, that they would be able to secure similar material and arrange to have the curtains made, as well as the tie backs.

Regarding the question of power, you will note that they have somewhat evaded the direct question as to whether there is sufficient power in this motor unit to take care of itself and one loaded trailer with passenger or freight on a continuous maximum grade of 2.2%, six miles long. And I am at a loss as to how to get that information for you except through the Dodge Company if I had the weights that are contemplated in the question. It is possible that the Dodge Company may be able to give me that information, were I able to supply them the data on weights.

If there is any more I can do on this for you, please advise me.

With kind regards.

Yours very truly


Harold W. Snell
General F. P. & I. Agent

Encs.
am

OUTLINE SPECIFICATION FOR TRAILER

One Railmobile Passenger Trailer to operate with present Railmobile Coach No. 111, general outline dimensions (width and height) to conform to those shown on Drawing C-151, which also shows suggestions for layout of windows, doors, seating arrangement, lighting, ventilation, etc.

Car to be equipped with hydraulic brakes operating by air pressure on four wheels equipped with $5\frac{1}{2}$ " by 35" O.D. 10 ply pneumatic tires and air connections at forward end to couple on to railmobile, brakes being operated from forward car. An emergency hand brake to be installed, same as on railmobile coach, which is mounted on a $1\frac{1}{2}$ -ton Dodge chassis and built by the Kalamazoo Car Supply Company of Kalamazoo, Michigan.

Seats, cushions, insulation, inside lining, etc., to be same as ~~what is~~ on the present railmobile coach, or if different to be approved by the A.R.R.

Trailer to be equipped with lights operated from battery on railmobile coach and have plug-in connection on front of the trailer.

Car to be so arranged that it can be heated in cold weather with stove or other approved method of heating.

Trailer to be painted with aluminum, same as present railmobile coach to which it will be attached.

Trailer to be equipped at each end with coupling device, which will satisfactorily couple onto the railmobile coach and work on a 20 degree curve without binding.

Railmobile builder may submit designs of trailer of similar capacity with specifications of same, which would be suitable for operation with present railmobile coach.

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S
Railmobile Trailers.

Anchorage, Alaska,
November 9, 1935.

Mr. Harold W. Snell,
Special Representative Agent,
The Alaska Railroad,
333 North Michigan Ave.,
Chicago, Illinois.

Dear Mr. Snell:

I am enclosing herewith Superintendent Kinsell's letter of October 31st, together with drawings showing the alterations in the Kalamazoo motor unit that we recently purchased so that it will have larger passenger seating capacity, or an increase from 9 to 14 passengers; also, the reduction of the baggage compartment, which we figure, after the change, will be large enough to accommodate all of the baggage that will be hauled.

The conversion of the trailer mentioned in Mr. Kinsell's letter of October 31st should be disregarded, as I am firmly convinced that it would prove far more economical to have a new passenger carrying trailer built in the States, with a seating capacity for 28 persons, and I had Mr. Kinsell outline specifications for this trailer, which are also enclosed.

This means that we would retain the baggage unit without any alteration and use it only when required to haul important freight or express shipments.

Will you, therefore, be good enough to interview the Kalamazoo Car Supply Company, or other manufacturers of similar equipment, for the purpose of obtaining the required information as set forth in Mr. Kinsell's letter.

It should also be determined whether there is sufficient power in the motor unit to handle itself and one loaded trailer with passengers or freight on a continuous maximum grade of 2.2 per cent, 6 miles long, and if it is deemed advisable to increase the size of the motor, would other changes have to be made on the motor unit, such as clutch, propeller, shaft, etc.

Mr. Harold W. Snell

-2-

November 9, 1935.

There is enclosed a letter from Mr. Kinsell, of November 8th, requesting information as to cost of different materials to be used when altering the motor unit, which will be done at Anchorage.

Yours very truly,

Signed: O. F. Ohlson
O. F. Ohlson,
General Manager.

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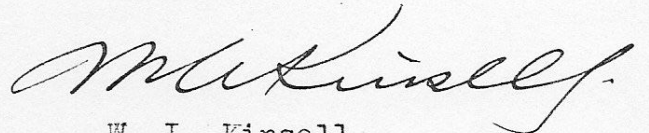
O. F. Ohlson,
General Manager.

Anchorage, Alaska,
November 8th, 1935.

COLONEL O. F. OHLSON:

Attached is an outline specification and blue-print of a suggestion for a trailer to be operated along with the present railmobile coach, the idea being to send out this outline specification and blue-print to the manufacturer, who can quote on what this trailer will cost.

At the same time, they can submit designs and prices on the car builder's design of trailer which would be suitable for operation along with the present railmobile coach.



W. L. Kinsell,
Sup't. Motive Power & Equipment.

WLK:S

OUTLINE SPECIFICATION FOR TRAILER

One Railmobile Passenger Trailer to operate with present Railmobile Coach No. 111, general outline dimensions (width and height) to conform to those shown on Drawing C-151, which also shows suggestions for layout of windows, doors, seating arrangement, lighting, ventilation, etc.

Car to be equipped with hydraulic brakes operating by air pressure on four wheels equipped with 5½" by 35" O.D. 10 ply pneumatic tires and air connections at forward end to couple on to railmobile, brakes being operated from forward car. An emergency hand brake to be installed, same as on railmobile coach, which is mounted on a 1½-ton Dodge chassis and built by the Kalamazoo Car Supply Company of Kalamazoo, Michigan.

Seats, cushions, insulation, inside lining, etc., to be same as what is on the present railmobile coach, or if different to be approved by the A.R.R.

Trailer to be equipped with lights operated from battery on railmobile coach and have plug-in connection on front of the trailer.

Car to be so arranged that it can be heated in cold weather with stove or other approved method of heating.

Trailer to be painted with aluminum, same as present railmobile coach to which it will be attached.

Trailer to be equipped at each end with coupling device, which will satisfactorily couple onto the railmobile coach and work on a 20 degree curve without binding.

Railmobile builder may submit designs of trailer of similar capacity with specifications of same, which would be suitable for operation with present railmobile coach.

Anchorage, Alaska,
November 8th, 1935.

COLONEL O. F. OHLSON:

With further reference to changing the present Kalamazoo Railmobile Coach from nine to fourteen passengers, would say that we will need the following material, which I would suggest be obtained from the Kalamazoo Car Supply Company so that it will be in keeping with the present furnishings in the car:

- 2 two-person wicker seats with brown leather upholstering and individual cushions.
- 1 two-passenger brown leather seat for driver and passenger, top of cushion 12" and top of back about 28" above floor, similar to present driver's single seat.
- 2 pieces $\frac{1}{2}$ " round nickel plated curtain rods 28 $\frac{1}{2}$ " long.
- 2 nickel plated two-screw supports with hole for above $\frac{1}{2}$ " rod (will use present end supports).
- 4 curtains and tie-backs for two windows.
- 1 piece imitation brown leather or pantasote wall covering insulation padding 36" by 72", and also sufficient for ceiling 60" by 88". This latter piece can be two separate pieces 36" by 7'4" long. If this material comes 36" wide a piece 7 yards long will be needed. This material required on account of moving present partition back 31" due to putting in another row of seats and cutting off partition which extends above the seats, also covering ceiling and sides above partition in baggage room with wall covering and padding, same as balance of car.
- 1 round ceiling light fixture with glass covering.
- 2 pieces 5/32" plate glass set in rubber lined channels (same as present windows) over all dimensions 23-7/8" by 26-7/8".
- 1 24" by 60" Type 2 Met-L-Wood panel 3/8" thick with steel two sides, manufactured by Met-L-Wood Corporation, 6755 West 65th Street, Chicago, Ill.

All of the above items referred to are to be like what is in the railmobile at present, which was manufactured by the Kalamazoo Car Supply Company at Kalamazoo, Michigan.

W. L. Kinsell

W. L. Kinsell,
Sup't. Motive Power & Equipment.

WLK:S

Anchorage, Alaska,
October 31st, 1935.

COLONEL O. F. OHLSON:

Attached is print of Drawing C-150 I made up, showing how the present Kalamazoo motor car can be rearranged to give additional seating capacity, increasing same from 9 to 14 passengers and also allow ample room in the rear for carrying the ordinary amount of hand-baggage, like suit-cases, grips, etc.

The spacing of the seats as shown is identical with the present spacing except putting in two additional double seats. I have shown them to be 35" wide, same as used on Fairbanks Morse cars, instead of 36½", as on the Kalamazoo car, placing one of the present double seats immediately back of the other when the 5-person seat is moved back 31" to give the same spacing between the seats fore and aft as at present. This will increase the aisle space 1½" where it is most needed. This scheme of seating means a change in the driver's seat, making same a double one to accommodate another passenger, as is done on Fairbanks Morse cars.

An additional window put in on each side, the partition moved back 31" and cut down to the height of back of seats, and using only one of the double doors to the baggage compartment, placing the other door on the opposite side, cover the principle changes suggested.

By cutting down the partition between passenger and baggage compartment, the driver has a clear vision in backing up, so it is not necessary for him to open the door to see where he is going. In moving back the seats the floor linoleum would have to be extended, but we could piece this out with what we have. It would be necessary to obtain two additional windows, extend insulation back to the partition, same as arranged at present, and also insulate the walls and ceiling back in the baggage compartment to keep out the cold when run in cold weather. Additional lighting would be required, which could easily be taken care of.

The above shows what is needed to change over the present motor car to carry 14 instead of 9 passengers, and, no doubt, the Kalamazoo Railway Supply Company could give us a figure on what the material required would cost.

It might be advisable to find out from the Kalamazoo Railway Supply Company if it would be advisable to increase the size of the motor, since the car is driven by only one pair of wheels equipped with rubber tires instead of two pairs as used on Fairbanks Morse railroad buses which are mounted on a 1½-ton Dodge truck chassis driven by the same size motor as on our Kalamazoo car. I note in cases where an unusually large power unit or trailer is required to meet the needs of the service, Fairbanks Morse can build the rail-

mobile on a 2-ton chassis driven by a 96 HP engine; but, of course, this means four tires to do the driving instead of two as on the Kalamazoo rail bus. If it was decided to increase the size of motor on this car we should also know if on account of increasing the size of the motor what else it would be necessary to change, that is, would the present clutch, propeller shaft, universal and rear end be okay to use with a larger motor. The present motor is a Dodge No. T-2 11478-NC rated at 62 HP at 3000 RPM mounted on a $1\frac{1}{2}$ -ton chassis.

This blue-print C-150 also shows how the trailer could be arranged to seat 25 persons, equipping car and insulating same with same material as in the present motor car, making windows of such size that they will fit in between the ribs or side posts in the present trailer, installing a five-passenger seat in the rear and ten double seats, as shown, like the three additional required for the motor coach. A stove or other form of heating would be required in chilly and cold weather.

This blue-print shows how the two cars would appear when coupled together both equipped with $5\frac{1}{2}$ " by 35" pneumatic tires on trailer same as on motor coach at present (so as not to require two different sizes of spares to be carried). It would look better and the side step would be lowered $3\frac{1}{2}$ " from what is shown on the trailer if $5\frac{1}{2}$ " by 28" pneumatic tires were used on the trailer instead of the 35" as on the present motor coach. This would make the roofs and under side of the two cars line up much better and the windows in the trailer could be raised $3\frac{1}{2}$ " from what is shown so that they would line up with the windows in the motor coach; but this would require a different size tire for the spare on the trailer than the size now used on the motor coach. The two double side doors could be remodeled and rebuilt into single doors with the same size glass as in the windows. Glass should also be put in the front and rear end of trailer.

The trailer would probably require a conductor or someone to assist the driver when passengers are getting into or out of the car, to assist the driver when he needs help such as in a derailment, changing a tire, or at other times.

The trailer should be equipped with electric lights, and possibly it would be well to have the Kalamazoo Railway Supply Company advise what it will cost for all the equipment necessary, including the above referred to, in order to change the present trailer over to the layout as shown on this print C-150, and to also quote a price on a trailer to carry approximately this same number of passengers -- or of whatever other capacity the trailer would be required to carry -- but to their own design and layout which would look all right when coupled to this Kalamazoo motor car, as they would probably incorporate ideas which they have obtained through

building these motor cars and trailers for other railroads.

In either case, if a stove was required we would figure on installing same here at Anchorage.

I doubt the advisability of increasing the size of the motor in order to pull this equipment (including trailer) at a high speed on the level or at a faster speed up grade (including trailer) than the present motor will do, as it will increase the work to be performed by the two rubber tires in transmitting the additional power to the rails; also the higher the speed the more work these two tires will have to perform in stopping quickly, especially when it is loaded with passengers.

I note Fairbanks Morse build a similar 14-passenger car which hauls a trailer with 2-ton capacity, the motor car being mounted on a 1½-ton Dodge truck chassis and powered with a Dodge motor, all being like that on the Kalamazoo car recently acquired by The Alaska Railroad; but it has four driving wheels equipped with 5½" pneumatic tires instead of two as are on the Alaska Railroad railmobile. It would be well to obtain an expression from the Kalamazoo Railway Supply Company as to the advisability of increasing the tractive power by increasing the size of the motor without an increase in the number of drivers, as it would greatly increase the work required of the two present tires.

Would like to know if there is anything further you desire to be done in connection with this railmobile.

W. L. Kinsell,
Sup't. Motive Power & Equipment.

WLK:S