

RAILWAY CAPACITY AND TRAFFIC

CONTROL

By  
M. J. Gormley.

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# Railway Capacity and Traffic Control

From my contacts with the Army, I learn that the principal questions in the minds of the officers today are:

1. What were the principal reasons for the carriers being taken over by the government in January, 1918?

2. In view of the long period of depression since 1930 and the decrease in the purchases of equipment by the railroads during that period, what is the capacity of the railroads to handle a greatly increased traffic today or in the future?

3. What organization have the railroads today for dealing with transportation?

4. What lessons were learned and what methods or plans should be adopted to avoid in the future the difficulties in transportation experienced during the World War?

These questions I will deal with briefly in the order named.

## Railroad Situation in War Years

What was the reason for the railroads being taken over by the government on January 1, 1918? Many pages could be written in answer to this question but, summed up, I think the answer from most sources would probably be that one of the principal reasons was a financial one. Prices of materials were rising during 1917 and railroad rates were not increased to offset the increases in prices. The carriers handled more revenue ton-miles in 1917 than in 1916 by 8.8 per cent and more passenger miles by 14.1 per cent, and earned a total increase of 11.6 per cent in operating revenues. During the same period, operating expenses increased

20 per cent and taxes 36.2 per cent, with the result that net railway operating income decreased approximately 10.2 per cent. Many employes, including skilled employes vital to proper maintenance, particularly of equipment, had volunteered or were drafted for war service or, by reason of higher wages, had gone to work in the plants of war industries, such as munitions plants, shipbuilding, etc. Railway labor was demanding increased wages by reason of increased living costs and in the face of a decrease in railroad net income.

Congestion of freight traffic in 1917 was due to the shipment of freight in quantities far beyond the ability of the receivers to absorb and vast exports without consideration of the availability of ocean shipping, and the legal requirement that government freight be given preference and priority in movement without any consideration being given to ability to unload promptly. This caused, in addition to the congestion, car shortages by reason of the cars being used for storage purposes instead of for transportation.

While this question of congestion is mentioned last, it is not because of any opinion that its importance is a lesser one; in fact, I am of the opinion that it was the most important reason for government control, as I will later attempt to show.

## Capacity to Handle Traffic

Now we come to the second question, the capacity of the railroads to handle a greatly increased traffic today or in the future. To answer more clearly this question, a series of

charts are attached hereto. (See Appendix No. I). These charts were originally prepared for this lecture but this same question had been raised in so many places that it was found necessary to present this information to a meeting of the Atlantic States Shippers Advisory Board in Newark, New Jersey, on October 5th, 1939. No doubt the following statement may sound familiar to a few of you but probably not to all. In any event, the subject is of such interest that it will bear repetition with considerable advantage from an information standpoint.

Chart No. 1 summarizes the capital expenditures of the railways for the period 1923 to 1938, inclusive. During the years 1923 to 1930, capital expenditures ranged between a high of \$1,059,000,000 in 1923 and a low of \$676,700,000 in 1928, and averaged \$842,700,000 per year for the eight-year period as a whole. In the succeeding eight-year period, 1931 to 1938, expenditures ranged between a high of \$509,800,000 in 1937 and a low of \$103,900,000 in 1933, and averaged \$258,700,000 for this latter period.

Chart No. 2 shows the number of new and completely rebuilt steam locomotives and freight cars put in service 1923 to 1938, inclusive. These figures do not include the number of locomotives and cars modernized since 1925, so that the record is incomplete to that extent.

Chart No. 3 shows freight car and steam locomotive ownership as of September 1st of 1918 and each year 1923 to 1939. It shows that since the high point, ownership has decreased 713,426 freight cars and 23,373 steam locomotives.

### Car Repairs and Traffic Demands

Chart 3-A shows that car repairs are geared to traffic demands. During the eight-year period starting with 1923, the percentage of cars awaiting repairs never exceeded 9.6 per cent and went as low as 5.4 per cent. Since 1932 it has ranged between 15.6 per cent and 10.8 per cent. This figure can and will be reduced to the 1923-1930 level if cars are needed for increased business in prospect.

It is significant of the relationship of car buying to increased traffic, to note that in 1937 with increasing traffic, 75,058 new cars were added in that year.

Chart No. 4 shows that there has been an increase in average tractive effort of locomotives of 43.3 per cent since 1918 and an average increased capacity per car of 19.5 per cent, or 8.11 tons per car.

A very important factor is that over 35,000 locomotives and over one and a half million freight cars have been destroyed as obsolete since 1923.

It should be kept in mind that the age of locomotives or cars is not now, if ever, a criterion to follow as to the fitness of equipment for service. A modernized car or locomotive is just as serviceable as new equipment. The degree of maintenance through the years of life of the equipment must be taken into consideration in judging the present fitness for service.

Chart No. 5 shows the cars of revenue freight loaded during 1918 and 1923 to 1938. In each of the eight consecutive years immediately succeeding 1922 the railroads handled traffic greatly in excess of that handled during the war period, and this peak volume of traffic was handled without car shortages or congestion. It is also interesting to note

that in each of those eight years the loadings of 1918 were exceeded by between a million and a quarter and approximately eight and one-quarter million cars per year.

Chart No. 6 shows minimum and maximum surplus cars for various years 1923 to 1939. During those years there was an average minimum surplus of 123,776 cars and an average maximum surplus of 426,221 cars, indicating that there was a reserve capacity even during those years of peak traffic movement. In 1929, the last year of heaviest loading, over 52,000,000 cars were loaded, but minimum surplus during the year was 107,301 cars. The maximum surplus during the same year was 447,141 cars.

#### **Factors of Efficiency**

Increased efficiency in operation, which is the vital point in determining rail capacity, is clearly shown in Charts Nos. 7, 8, 9 and 10.

Chart No. 7 shows an increase in freight train speed of 61.2 per cent between 1920 and 1938.

Chart No. 8 is a measure of the amount of work done by the railroads in a given period of time. It shows that gross ton miles per freight train hour increased 109.3 per cent in 1938 over 1920.

Chart No. 9 shows car miles per freight day. This was 24.6 in 1918 and reached a high of 32.9 in 1937. This figure includes all cars, whether en route, awaiting repairs, surplus, or in the hands of shippers for loading or unloading. It is estimated that an increase in movement of one mile per car per day has the effect of increasing the existing car supply by 70,000 cars.

Chart No. 10 shows the average load per car of carload traffic originated, which increased from a low of

approximately 34 tons per car in 1924 to a high of 36.7 tons in 1937. Generally speaking, tons per car of carload traffic drops off slightly when total carloadings decrease. It is estimated that if the 1937 carload traffic had been handled with the tons per car of 1924, it would have required 90,000 more cars to have moved the same tonnage.

Chart No. 11 shows the cars of revenue freight loaded—weekly average by months in 1918 and various years since that time. This shows a wide fluctuation in the traffic from one season to another and from one year to another. That fluctuation from one season to another and from one year to another without a doubt is greater than the total war load was at any time.

Chart No. 12 is a summary of various comparisons with 1918. It is interesting to note from this chart that with the car ownership in 1929, 60,000 less than in 1918, and locomotive ownership 5,600 less, nevertheless there were loaded in 1929, 8,236,000 cars more than were loaded in 1918. The figures of gross ton-miles per freight train hour for 1918 are not available but the chart shows a great increase in the average since 1920.

#### **The Shippers' Advisory Boards**

A very important factor today, not in existence until 1923, is the thirteen shippers advisory boards, each composed of a large number of shippers and receivers, divided into committees representative of various commodities. They work closely with the District Manager of the Car Service Division of the Association of American Railroads in each of the districts, and provide the railroads with estimates of probable car requirements three months in advance. They also co-

operate with the railroads and the Car Service Division in improving car efficiency by more prompt loading and unloading, particularly in times of rapidly increasing business. Their work has been most effective, and in times of stress it is invaluable.

The railroads and the Car Service Division well know that the cooperative spirit through the Advisory Boards will bring about the elimination of waste in the use of equipment, by loading and unloading promptly, by not ordering more cars than are actually required, by loading in cars the maximum tonnage where such action is practicable. All of these efforts add greatly to the railroad capacity.

The entire transportation machine is operated by a human agency usually called management and men. The railroads have a great body of trained and skilled workmen who know their business and can be relied upon to do their full share in any case of emergency. The capacity of a human individual under stress of circumstances can never be measured by the statistician with his slide rule and to the last decimal point. It is, however, an important factor.

#### **More Traffic With Fewer Cars**

Increased demands for transportation involve no great problem to the railroads provided equipment is used for transportation alone and not for storage purposes. In other words, the tying up of equipment by loading cars that can not be unloaded promptly reduces the capacity of the machine to the extent that such cars are tied up. Furthermore, it is probably correct to assume that demands by the Government for transportation in case of war would be more equally distributed throughout the year and thereby utilize a great many of the

cars shown as surplus on Chart No. 6.

The increased speed of movement and increase in general efficiency in every direction from year to year, as indicated by the various charts, are the reasons why a greatly increased traffic can now be promptly and satisfactorily handled with a large decrease in units of equipment compared with previous years.

Generally speaking, the full benefits of capital expenditures for increased efficiency and economy in operation are not obtained until there is a corresponding decrease in the units of equipment required to handle the same or larger traffic.

#### **Railroads Car Repair Program**

At a meeting of the member roads of the Association of American Railroads, held in Washington, September 19, 1939, consideration was given to transportation requirements and unanimous action was taken, similar to that of April 5, 1923, by the adoption of the following resolution:

“Resolved. That all roads take immediate steps to place their motive power and cars in shape to handle any possible increase in traffic.”

New freight cars placed in service or ordered by the railroads during 1939, according to plans announced at this same meeting, it was indicated, will exceed 46,000. Reports are not received by the Car Service Division of cars ordered until the orders have actually been placed. A number of lines were not heard from at the meeting but according to subsequent reports I believe it is safe to assume that there will be ordered or placed in service this year not less than 65,000 new cars.

Chart No. 13 shows the accumula-

tion of loaded freight cars and shortage of empties for loading in 1917, 1918 and 1919. This shows that we had a maximum shortage of cars in 1917 of 156,250 and at the same time we had a maximum accumulation of loaded cars standing still that could not be moved, due to inability of receivers to unload at destination, of 148,039 cars. Again in 1918 we had a maximum accumulation of 206,234 loaded cars and at the same time a shortage of 148,762 cars. In 1919 there were 98,000 loaded cars standing still, with a shortage of 67,182. If all of the loaded cars could have been unloaded promptly, it can be readily seen that the number of cars thus made available for loading would have wiped out the shortage during these periods.

When 200,000 cars are put out of service by being tied up under load for any reason, it means that the capacity is reduced by more than 400,000 carloads per month.

#### **Demurrage Charges 30 Per Cent Less**

The records show that there was collected in demurrage for cars delayed beyond the 48-hour free time for loading or unloading for the year 1918, \$37,566,295, or an average of 84 cents per car for each car loaded. In 1929, when the carloadings exceeded 1918 by over eight million cars, there was collected 36 cents per car, a decrease of 57 per cent. The demurrage collected per car loaded has gradually dropped since that time. In 1938 the demurrage collected per car was 17 cents, or 80 per cent under 1918 and 52½ per cent under 1929.

#### **Relation of War Load to Total Traffic —Freight and Passenger**

Chart No. 14 is designed to show the relationship of the war load to

the normal movement of traffic. The actual carloadings for 1916 and 1917 were not recorded. The figures for 1918 are actual and the other is estimated on the basis of tons per loaded car-mile, which can be considered a fairly accurate figure. It will be noted from this that a greater number of carloads were handled in 1916 and 1917 than were handled in 1918, but the tons originated show an increase in 1918 over 1916 of 5 per cent. The greater tonnage with a lesser carloading is accounted for by the heavier loading per car. This is shown more clearly under the heading of revenue ton-miles and indicates that there was an increase of 12 per cent in revenue ton-miles in 1918 over 1916. There being no other definite figure available as to what the freight war load actually was, we have assumed that all of the increase in 1918 over 1916 was due to the war load, or activities related thereto. This, no doubt, is a very high estimate but it is believed we are on the safe side in saying that the maximum war load at any one time would not be in excess of 12 per cent of the normal commercial load.

From this same chart you will note that the total passenger miles from May, 1917, to December, 1919, were 118,035,000,000. The troop passenger-miles during the same period were 7,000,000,000.

The troop transportation from May, 1917, to December 31, 1919, involved the movement of a total of 15,756,981 men. The average movement was 492,405 men per month. The monthly maximum was reached in July, 1918, when 1,147,013 men were moved. There were 25,953 special trains and the monthly maximum was 2,055 trains in July, 1918, with 759 miles traveled per train. These troops were handled under the Manager of the

Troop Movement Section of the railroads, under the direction of the Quartermaster General. This section was organized under the Railroad War Board prior to government control and the same plan without change was continued during government control.

There was no difficulty experienced in the handling of troops, very largely attributable to the fact that the entire movement was under control. In other words, soldiers were not put on cars until it was known that there was a place to unload them at destination. It is true, of course, that some of the movements had to be slowed up en route by reason of delays in arrival of ocean transport. This same organization is now stationed with the War Department routing troops and CCC workers and can be readily expanded to handle the troops in the same manner as was done during the last war.

While this looks like a very large troop movement, it was, in fact, only 6 per cent of the total passenger movement that took place during that same period, as shown on the chart. The main purpose in the presentation of this chart is to show how relatively small the war load, both passenger and freight, is in comparison with the normal commercial load.

#### **Carload Traffic Study**

Chart No. 15 is a carload traffic study showing the average number of cars of revenue freight loaded during the period 1923 to 1930. Since 1930 there has been a considerable increase in the diversion of traffic from the railroads to other forms of transportation. It is estimated that this is somewhat in excess of 10 per cent but it is also assumed that, with a heavy increase in traffic due to war conditions, there will be a proportionately

heavier increase in the durable or heavy goods, which commodities are very largely handled by railroads.

We have assumed, therefore, that in any other period of heavy traffic movement such as occurred in 1929, the railroads would be called upon to handle approximately 10 per cent less of that production than they actually handled in 1929. This reduction applied to the 1923-1930 period would leave 45,517,000 carloads to be moved on the railroads. Now assume that the war load would add 12 per cent to the revenue ton-miles of the railroads, converted into cars, this would increase the loading to 48,917,000 cars. In other words, any increase in the war load that might exist in the future is practically all offset by the diversion of traffic to other forms of transportation since the average of the 1923-1930 period.

#### **Railroad Organization and Activities**

Under the question of organization of railroads for dealing with transportation, chart No. 16 gives a general picture of the organization of the Association of American Railroads.

Chart No. 17 shows the same information but more in detail as to the organization of the Car Service Division and the relationship of its District Managers and other field forces to the Corps Area Headquarters of the Army.

Chart No. 18 shows the territory allocated to each of the Shippers Advisory Boards throughout the country, with the headquarters of each District Manager associated with these Boards.

Appendix No. II is an outline in detail of the organization and activities of the Association of American Railroads. It will be seen from this that the railroads are thoroughly organized through the Association and,



in our judgment, no other central organization is needed. The Association is composed of all the essential trunk lines and most of the essential short lines. Its headquarters are in Washington. The President of the Association is assisted by an Executive Committee of six railroad chief executives, selected from different parts of the country. The By-Laws provide that when necessary this Executive Committee would be in continuous session.

It is my belief that the Association now has all of the authority required to meet any predictable situation but, certainly, if it is determined that the authority is not as complete as it is thought it should be, the railroads can be counted upon to give to this organization such additional authority and support as is necessary.

#### **Prevention of Traffic Congestion**

Appendix No. III contains the detailed instructions covering operation of the embargo and permit system, under which is prevented accumulations of loaded cars beyond ability of receivers to unload promptly. This plan has been in effect for a number of years.

An embargo is a method of controlling traffic movements when accumulations, threatened congestions or other interferences with operation, of a temporary nature, compel restrictions against such movements. Embargoes will be placed against consignees who fail to unload or otherwise dispose of freight promptly on arrival.

Under the operation of the embargo and permit system, through the Association of American Railroads, traffic, other than Government freight, will be controlled by this system to prevent the possibility of any congestion of traffic. This will be done in the in-

terest of the shippers as well as the railroads. The plans of the War and Navy Departments, coordinated through the Army and Navy Munitions Board, provide that Government freight must not be loaded on cars until it is known that it can be unloaded promptly at destination. The Government, if found necessary, can supplement their instructions by arranging through the Association of American Railroads for issuance of embargoes and only permitting cars to be loaded when they can be unloaded promptly at destination. This will prevent the main difficulty experienced in 1917 and 1918 when cars were loaded without any provision for insuring their prompt unloading.

A great many of the difficulties in transportation in time of war can be traced to the fact that the war demands are greatly magnified by all interested, not realizing that the railroads are always, as a practical matter, on a war basis or can be made so to meet the demands of increased traffic, as has been demonstrated many times since the last war. Also considerable difficulty in transportation in time of war can be traced to attempts to change normal shipping operations, that is, by taking the handling of routing away from the industries themselves. Traffic managers of industries are thoroughly familiar with tariffs, routing and conditions of the route, equipment supply and everything of that kind. No matter from what industry the Government may be buying it will find that that industry has a very competent traffic organization and without doubt it will greatly facilitate the handling of traffic if full use were made of such traffic managers and their organizations. Cars for shipments from any industry should not be ordered by the buyer—the Govern-

ment—but should be ordered in the same way that ordinary commercial traffic is handled, that is, by the Traffic Manager in charge of the industry ordering the equipment, arranging the routing, etc, thus avoiding possible duplicate orders for equipment.

In any event, we believe that this question is well worth studying by those having to do with the transportation of war materials in time of war.

It can be said, of course, that such an arrangement does not provide for proper control and that the aim of the industry would be the same as it was in the last war—to get the material on cars, and ship regardless of the ability of the Government to receive and unload promptly, thereby using the cars for storage purposes and causing congestions. Under the plans already mentioned of the Army and Navy Munitions Board, they specify that cars must not be loaded until it is known that they can be unloaded at destination. It is assumed under such arrangement that when an order is placed for materials the order will specify either a definite date before which it cannot be shipped or a definite requirement that it will not be shipped until further notice is received from the officers in charge at points of export, depots, training cantonments, etc., that the material can be disposed of promptly on arrival. It might again be said that such an arrangement as this does not provide for the iron-clad control that should be provided to avoid the possibility of congestion, and that definite and complete steps that would provide effective control should be adopted at the outset. This could be done along the following lines when an order is placed by the Government:

Assuming that instructions were issued for the construction of a large

cantonment and that the material therefor was immediately ordered, the order for the material should specify—“this material is not to be loaded on cars until permit to do so is received from Construction Quartermaster at .....

To make doubly sure that the instructions would be carried out, the Construction Quartermaster at point of cantonment would direct the representative of the Association of American Railroads stationed at such cantonment to issue an embargo through the Association's embargo system against the movement of the traffic except under permit, and a permit only to be issued when the cantonment Quartermaster requested the Association of American Railroads representative to do so. It is assumed that a request for permit will not be made until the Quartermaster is satisfied that they are ready for the material and can unload it promptly upon arrival.

#### **Port Traffic Control**

Appendix No. IV is an outline of the plan for controlling port traffic at Atlantic Seaboard ports. This organization has been set up and is now ready to control, if necessary, port traffic in such a way as to avoid any possibility of congestion such as occurred prior to and during the last war.

#### **Railroads Able to Handle Traffic**

There need be no fear that the railroads will be unable to handle any anticipated increase in traffic. Some months ago an estimate was made that a minimum of 25 per cent more than the then existing business could be handled with the cars and engines in the condition that they were at that time. The facts are that for the week ending Saturday, October 21, 1939,

they loaded 861,198 cars, which was approximately a 45 per cent increase in traffic or 16 per cent over the estimate. In other words, the railroads have already handled 16 per cent more traffic than we anticipated they could handle. At the time of the heaviest loading, the program of repairs to equipment can be considered as only well under way. This merely indicates how conservative the estimate was. At the same time, it was estimated that if all the locomotives and cars awaiting repairs were put in condition for service, the railroads could then handle 50 per cent more than the then existing business. Based upon the accomplishments up to date, it is very apparent that this estimate also was far too low.

#### **Lessons in Transportation from World War Operation**

Now we come to the fourth and probably the most important question—

“What lessons were learned and what methods or plans should be adopted to avoid in the future the difficulties in transportation experienced during the World War?”

The lessons that have, or at least should have, been learned from the experience of 1917 and 1918 appear to me to be that:

(a) Care should be used not to magnify the possible war load. If it is well understood that the war load is very small in relation to the ordinary commercial load, as indicated in Chart No. 14, it will eliminate apprehension on the part of the public in general that they will be deprived of transportation when movement of the war load is undertaken. This fear that transportation will not be available for all who demand it is likely to be the basic cause of ordering more

materials and supplies than can be promptly unloaded.

(b) Methods should be adopted that will prevent accumulation of loaded cars due to inability of receivers to unload promptly upon arrival. This will, if necessary, be controlled under the operation of the present embargo and permit system of the railroads through the Association of American Railroads, as shown in Appendix No. III, so far as traffic other than government freight is concerned.

It should be remembered that from a transportation standpoint there is no necessity for having the anchors arrive before the ship's keel is laid; there is no necessity for having the piling arrive for the building of shipyards before the plans are completed; there is no necessity for any industry having a fear that they may not get transportation when they need it and ordering materials and supplies beyond their ability to unload when received, thereby using cars for storage purposes and reducing transportation capacity.

#### **Unnecessary Restrictions to Be Avoided**

Traders (shippers and receivers) can by a close check on their own business eliminate the necessity for the railroads making this embargo and permit plan fully effective by not ordering materials beyond their capacity to unload promptly, which, of course, is the most desirable method of control. The traders can be certain that the railroads will avoid any unnecessary restrictions or annoyances in the normal movement of traffic and will only use this method of control when necessary to prevent the use of cars for storage purposes to the detriment of all interests.

Remembering that one of the great problems with transportation in 1917-

1918 was due to the difficulty in maintenance of equipment, etc., the migration of labor from the railroads to war industries, etc., by reason of the greatly increased wages in those industries, some plan would seem to be necessary to prevent this. Careful consideration should also be given to the exemption from war service of skilled labor on the railroads. It should be recognized that skilled labor on the railroads, as an adjunct to the war machine, is just as important to the Army as is a skilled officer or soldier actually in the Army.

In connection with the government operation of the railroads during the last war, it is again interesting to note that the revenue ton-miles increased approximately 12 per cent in 1918 over 1916 and the revenue passenger-miles increased approximately 23 per cent in the same period. The operating expenses, however, increased 68.9 per cent and the total cost to the government of Federal control of transportation under this experiment was \$1,616,429,457.44. In other words, the government, by reason of the failure to increase charges to offset increased costs, furnished transportation by taxation to this extent.

#### Conclusion

In conclusion, let me call attention to the fact that the statistics and charts herein presented clearly indicate that the railroad plant is always in a state of national defense. It must necessarily be so or the normal commercial demand could not be properly handled. Furthermore, if it was not in such a position it could not have met the sudden increased demand for transportation during September and October of this year, when there was experienced the heaviest percentage increase in traffic that ever occurred in the history of the railroads in a similar period of time.

The railroads still have approximately 70,000 cars and 2,500 locomotives to repair to bring the cars and locomotives awaiting repairs down to a normal practical basis, generally considered to be 6 per cent for cars and 12 per cent for locomotives.

In addition, attention has already been called to the fact that there will be placed in service or on order this year 65,000 new cars. Between now and the first of April, when business generally starts increasing, it is expected there will be added to the service approximately 120,000 cars, new and repaired, which, on the basis of the performance of the week of October 21st, will be capable of loading in excess of 250,000 cars per month.

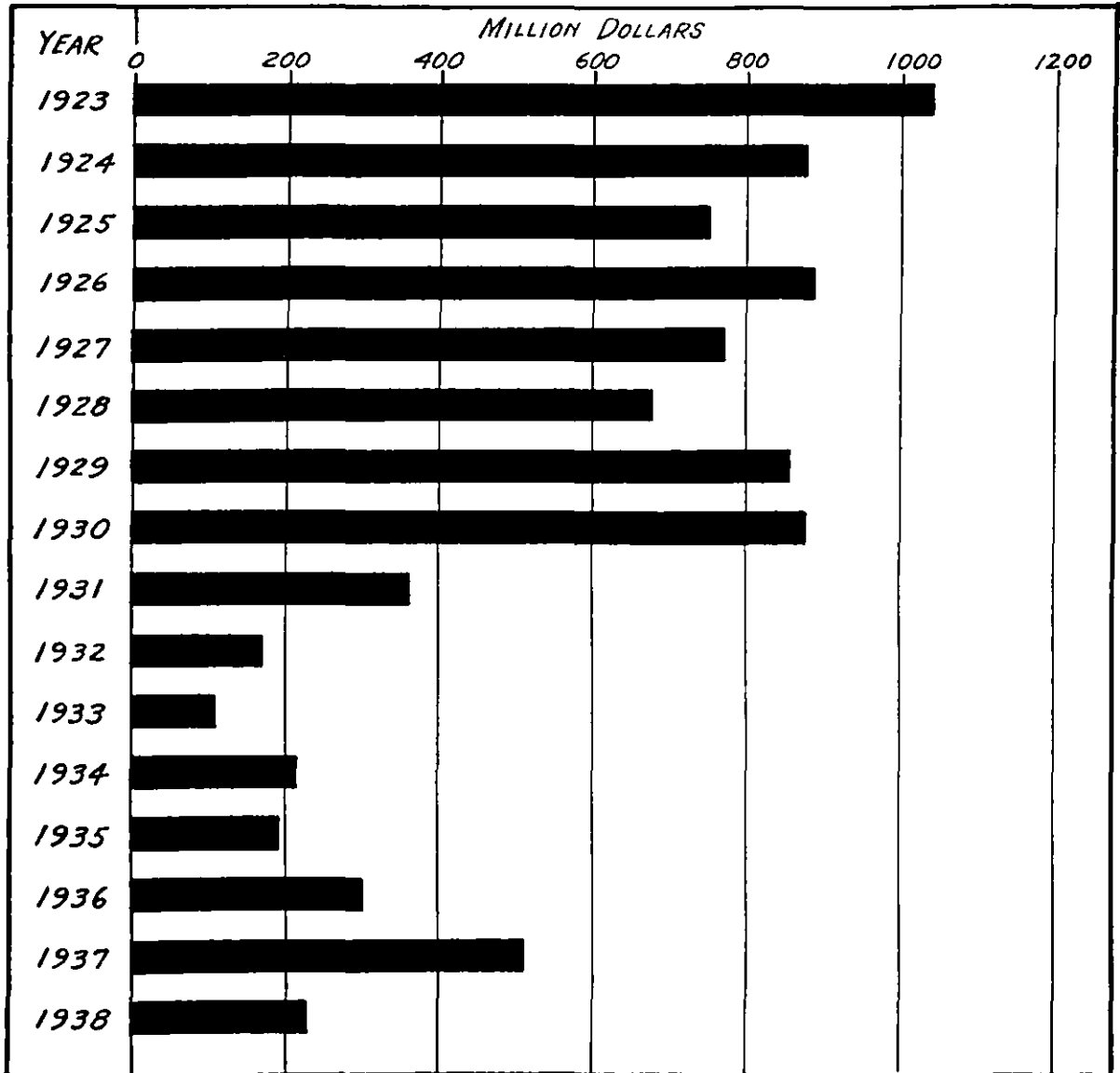
Here attention is again directed to what was accomplished in the addition of new cars and locomotives during the period 1923 to 1930, as shown on Chart No. 2. There was no difficulty in obtaining all of the equipment required during that period, which was the heaviest productive period ever seen in this country and, again, there will be no difficulty now in getting all the new equipment that may be required.

There is no denying the fact that whatever has been done before can be done again. Attention has been called to the condition existing in 1923, when the railroads were confronted with an anticipated traffic; the largest in their history, when they adopted a joint program to meet that demand which was carried out with complete success. The action taken at the meeting of the Railroad Executives in Washington on September 19, 1939, much in the same manner as that of 1923, and the results accomplished since that time have also proven conclusively that the railroads can meet any demand for transportation, present or prospective, that may be made.

# APPENDIX I

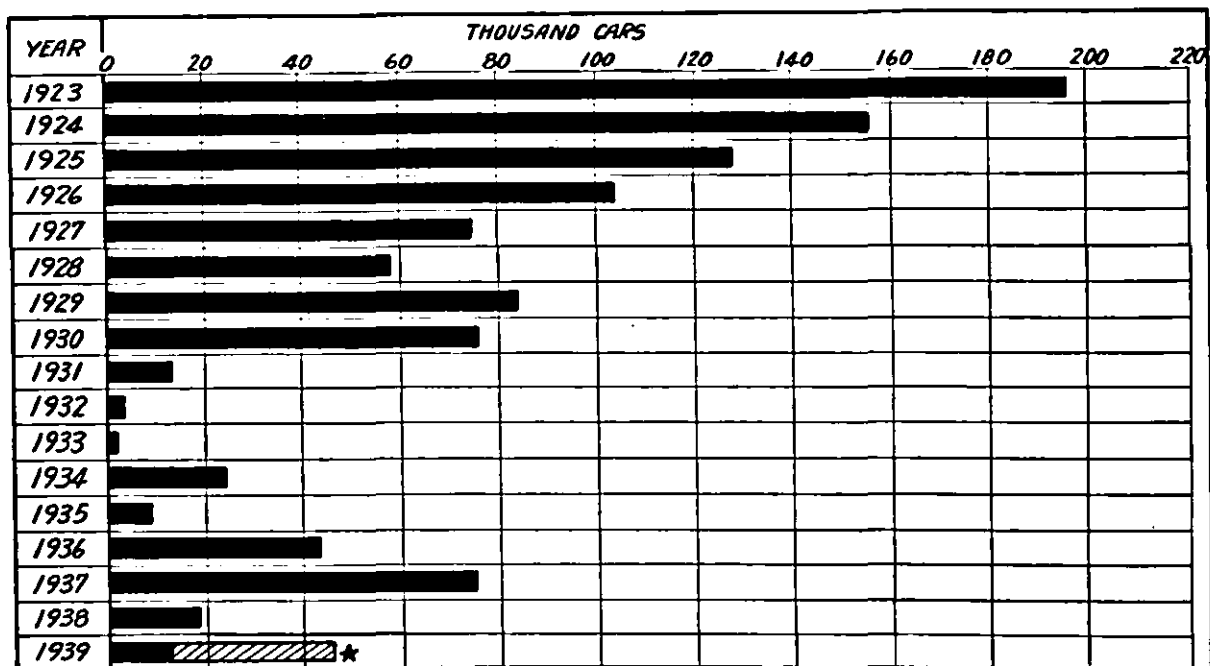
## CHART 1

Gross Capital Expenditures—Class I Railways



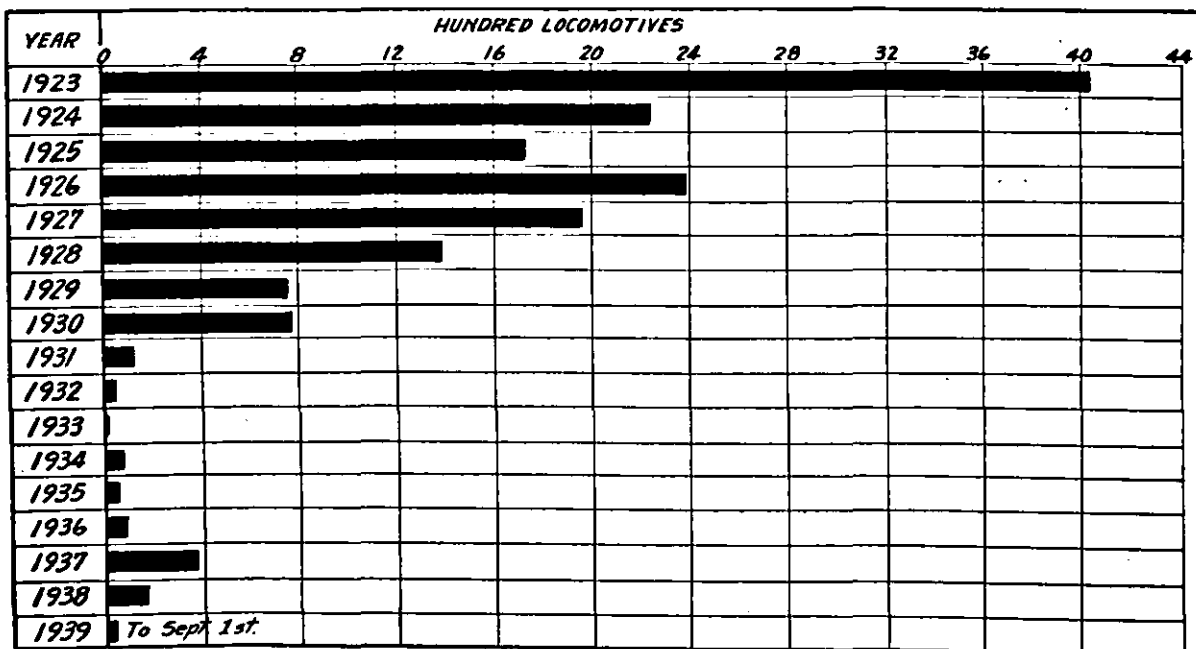
## CHART 2

### New Freight Cars Put in Service



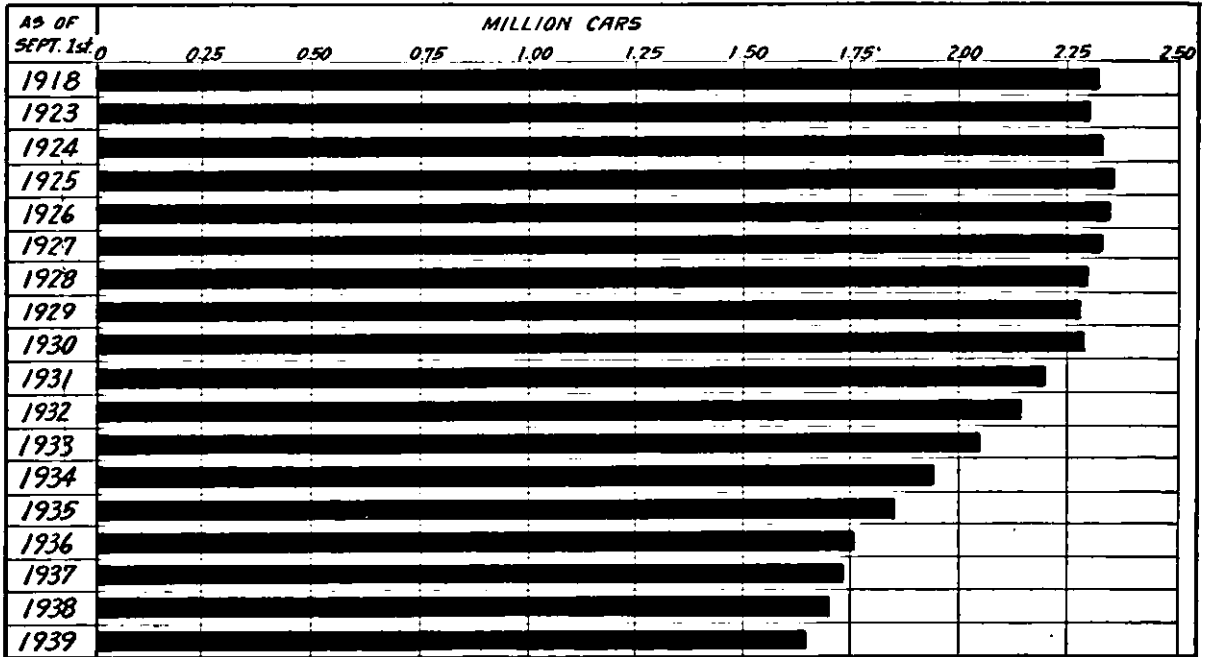
\* Solid section, placed in service to Sept. 1.  
 Shaded section, ordered to date.

### New Steam Locomotives Put in Service

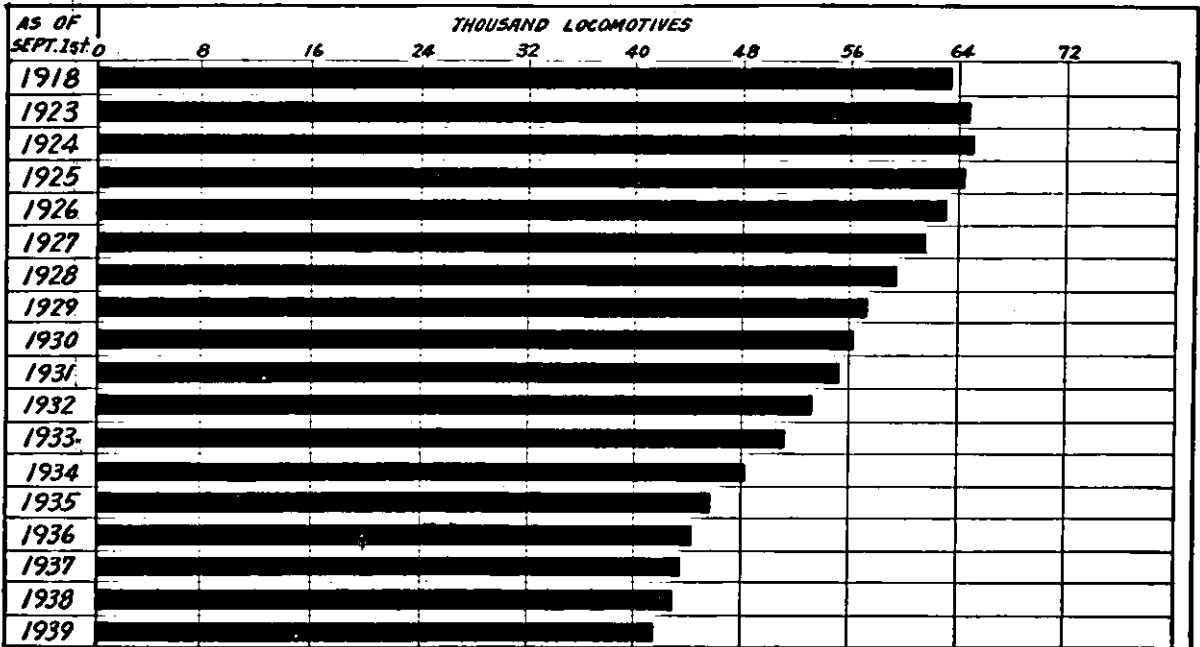


NOTE: Above figures do not include 450 Electric & Diesel locomotives installed since Jan. 1, 1934.

**CHART 3**  
**Freight Car Ownership**



**Locomotive Ownership**



**CHART 3A**  
**Freight Cars Awaiting Repairs**

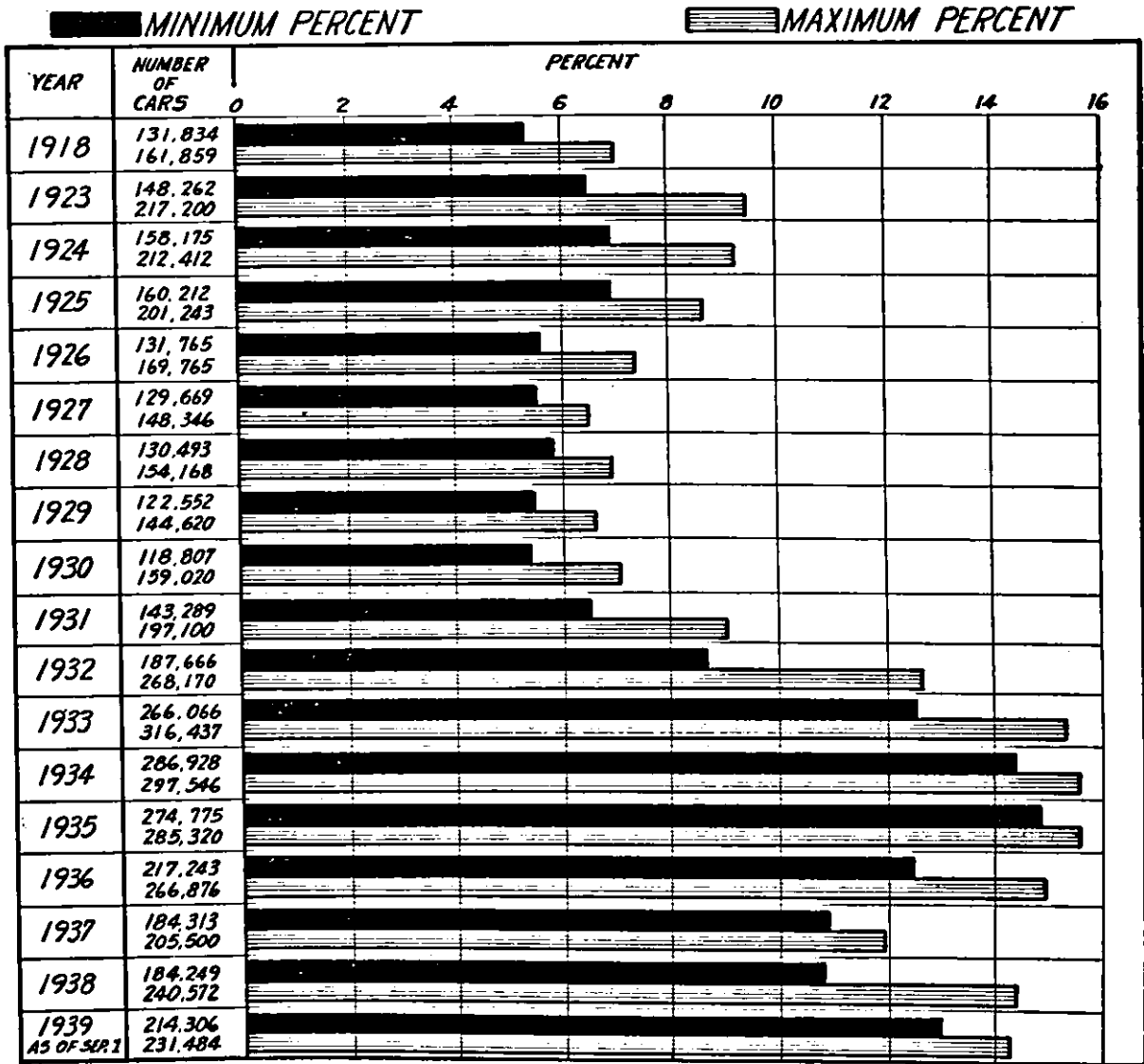
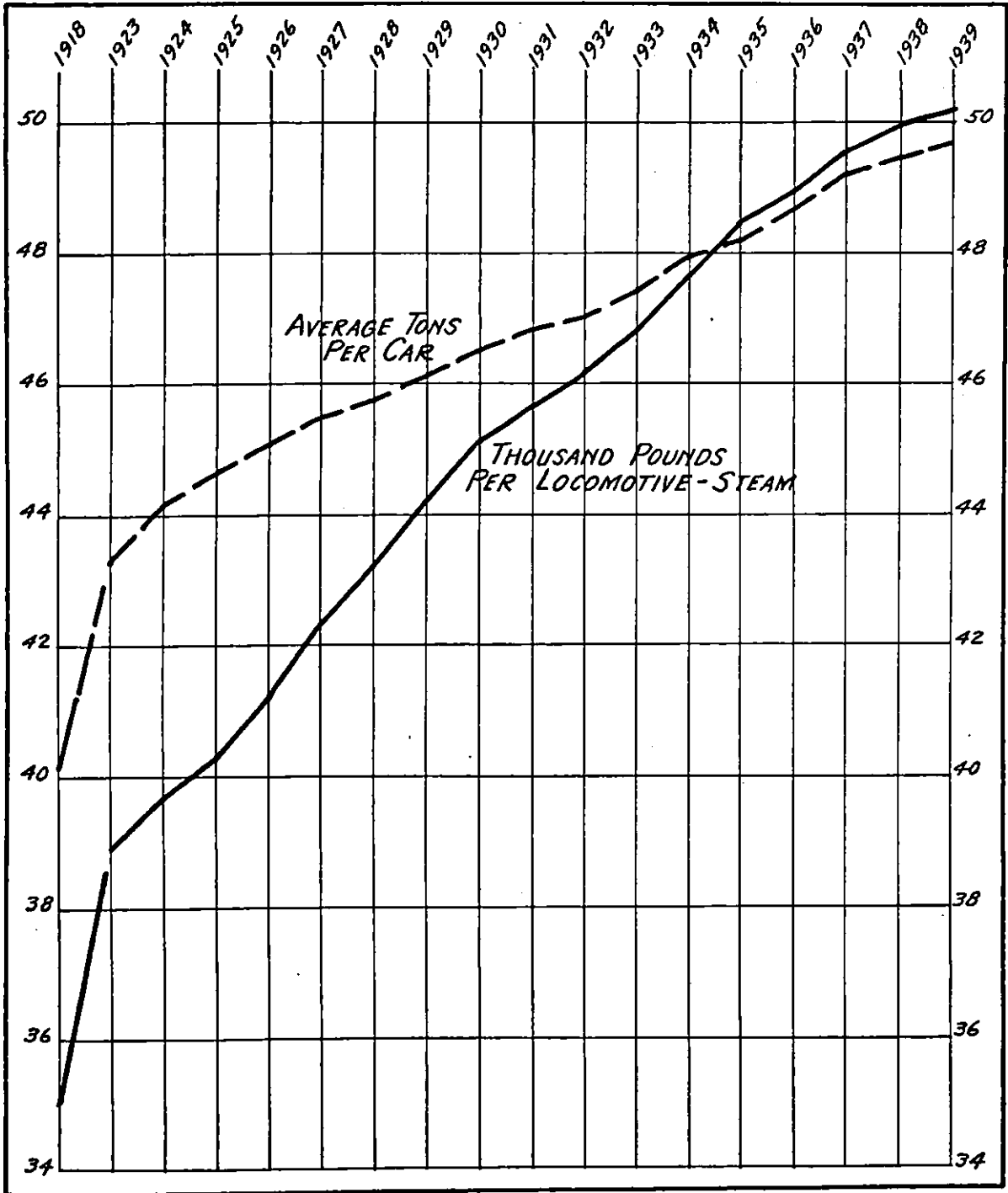


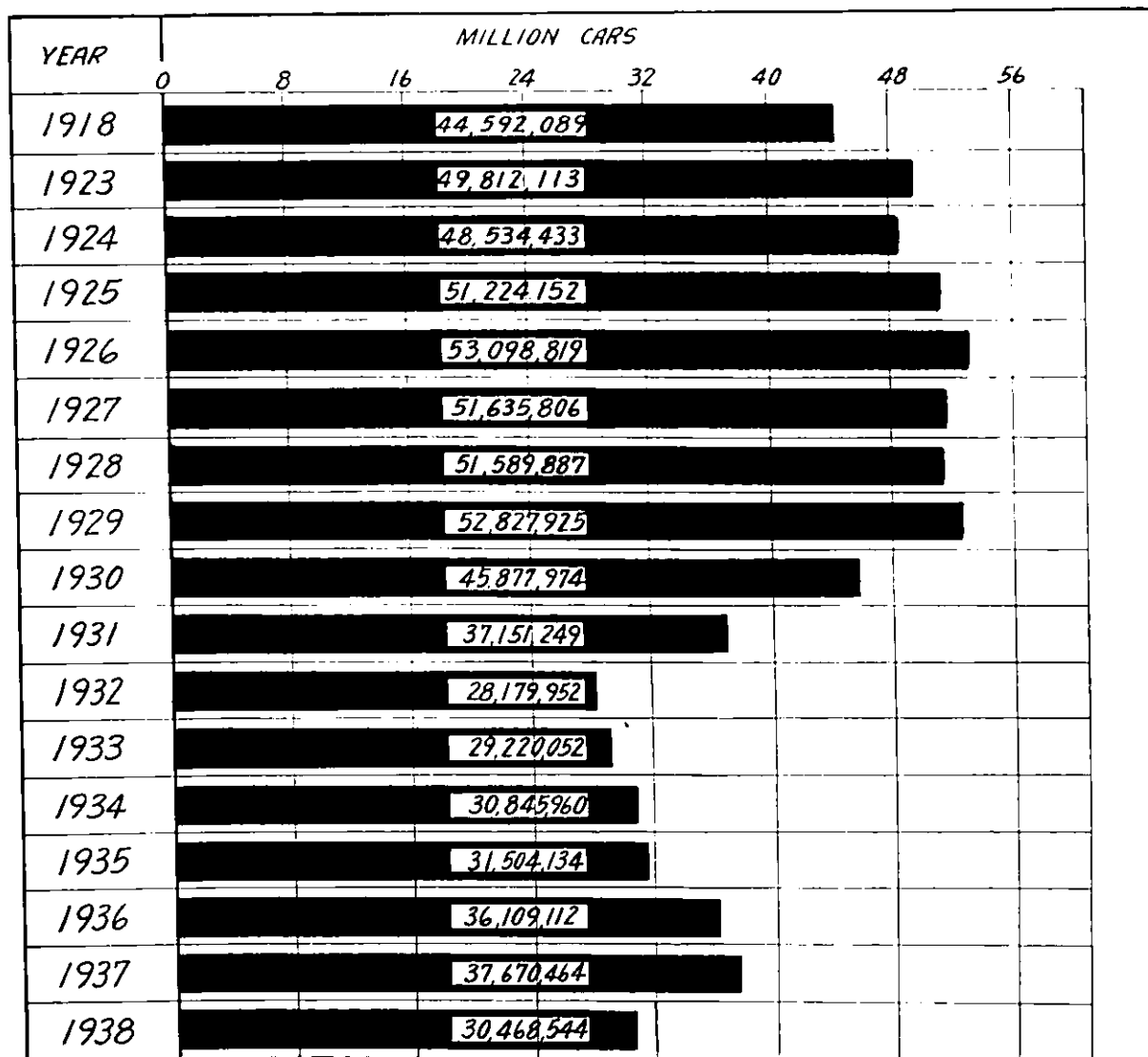


CHART 4

Average Car Capacity & Tractive Effort of Locos.



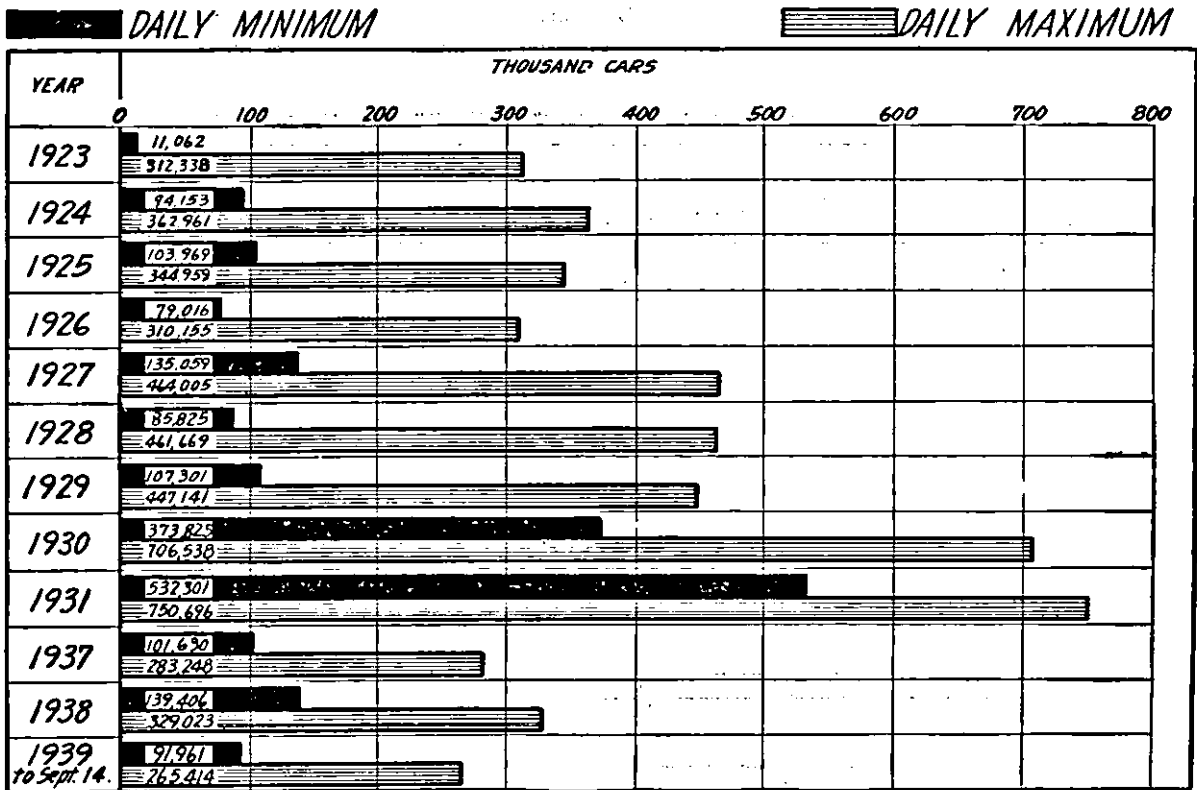
**CHART 5**  
**Cars of Revenue Freight Loaded—52 Weeks**



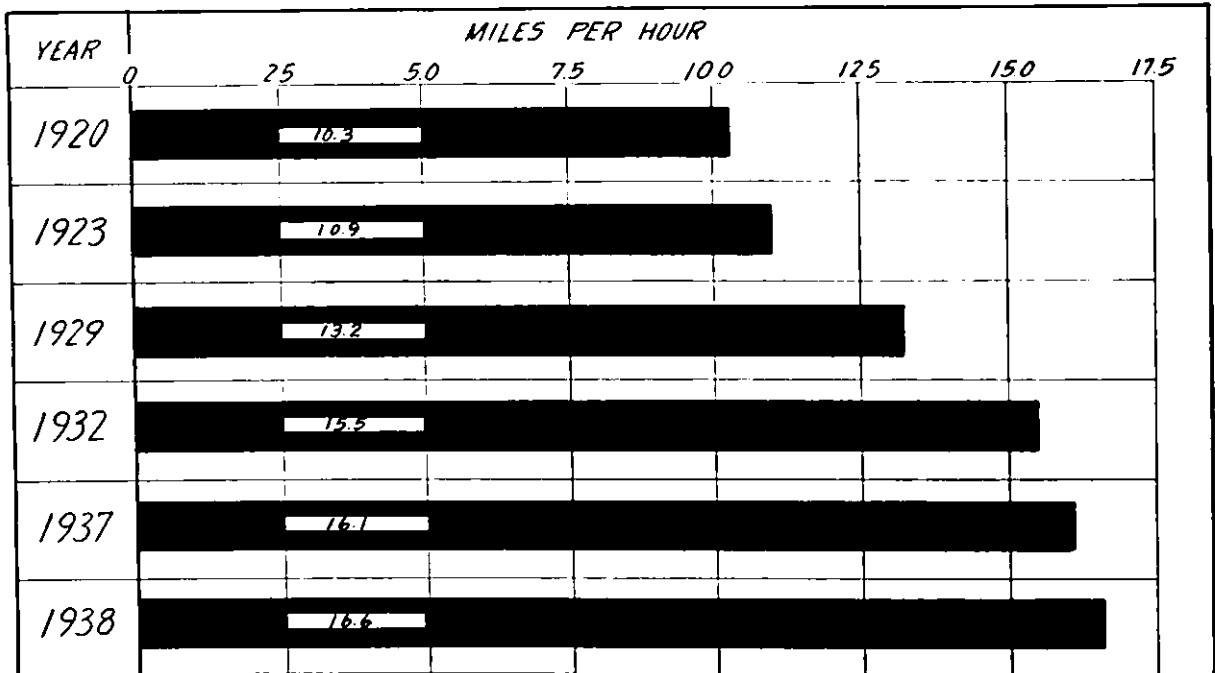
### CHART 6

### Freight Car Surplus

(Serviceable equipment not including cars in or awaiting shop)

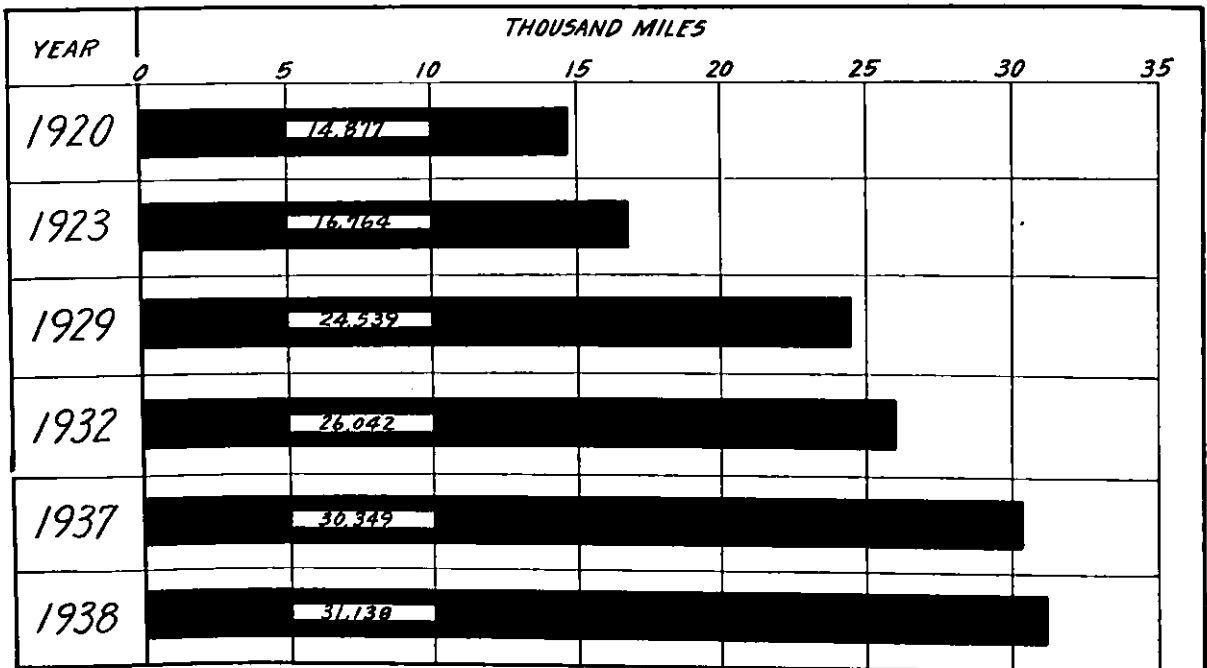


**CHART 7**  
**Freight Train Speed**  
 (Miles per Freight Train Hour)



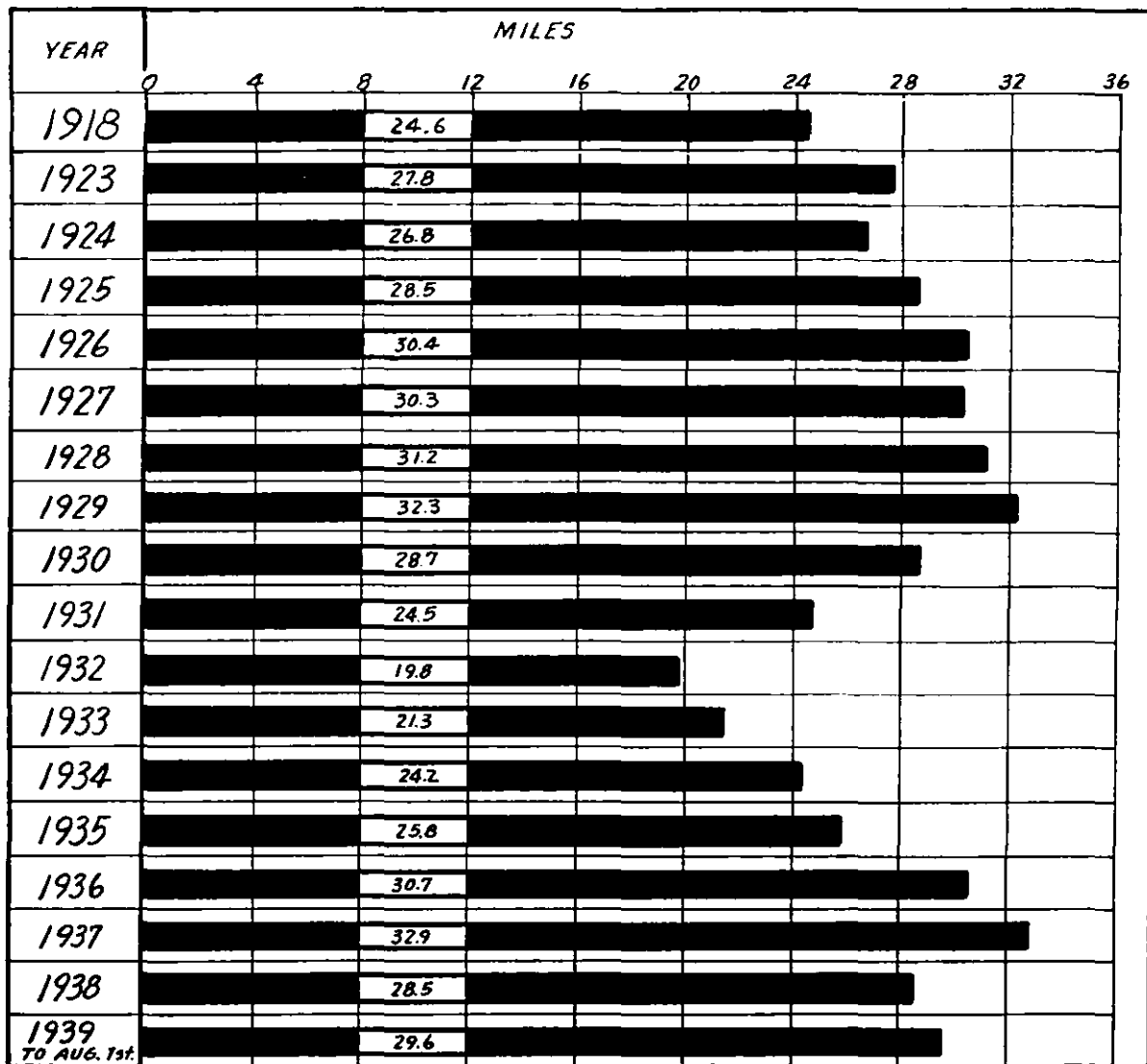
Per cent increase 1938 over 1920—61.2%

**CHART 8**  
**Gross Ton-Miles Per Freight Train Hour**

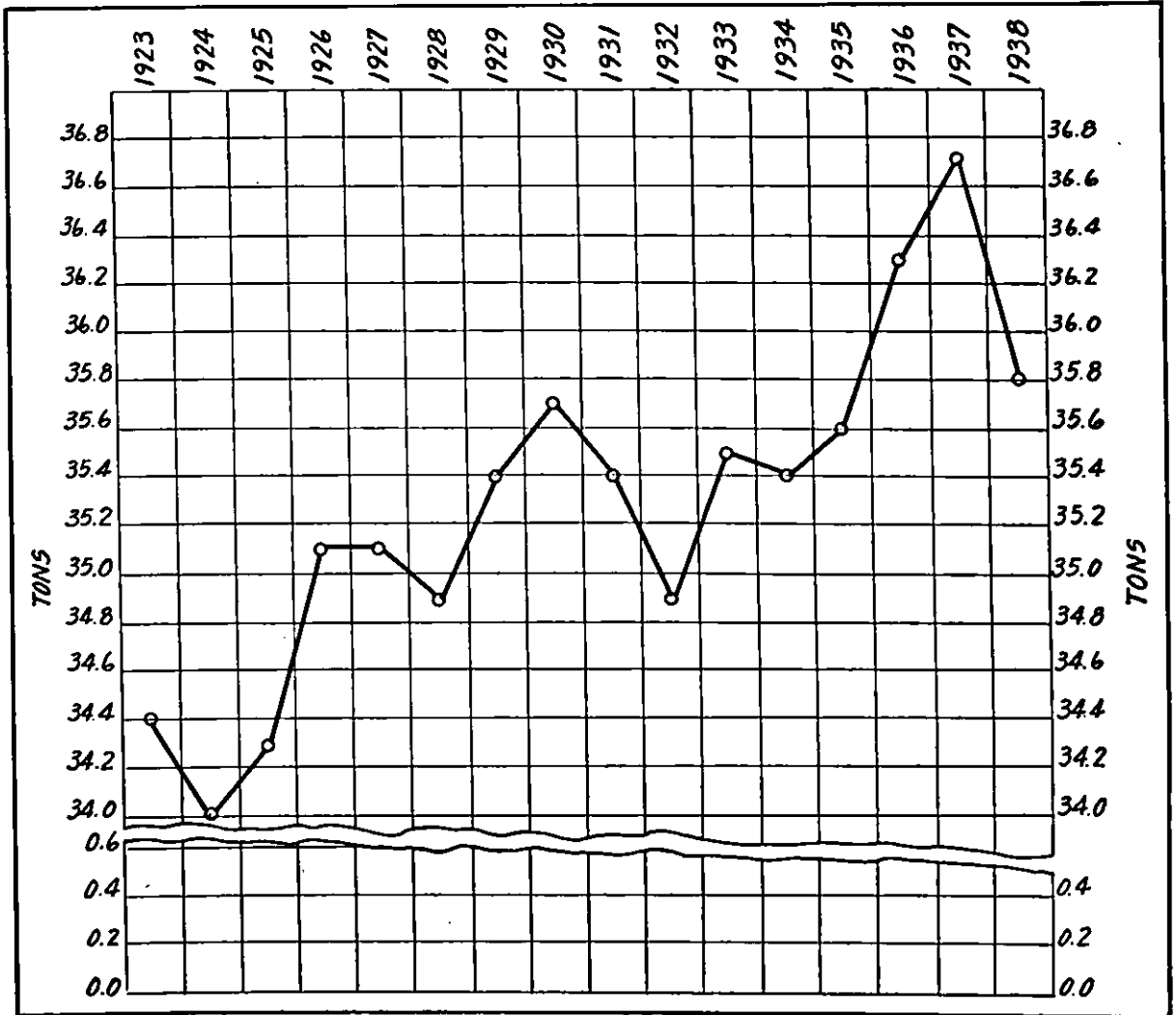


Per cent increase 1938 over 1920—109.3%

CHART 9  
Car Miles Per Freight Car Day

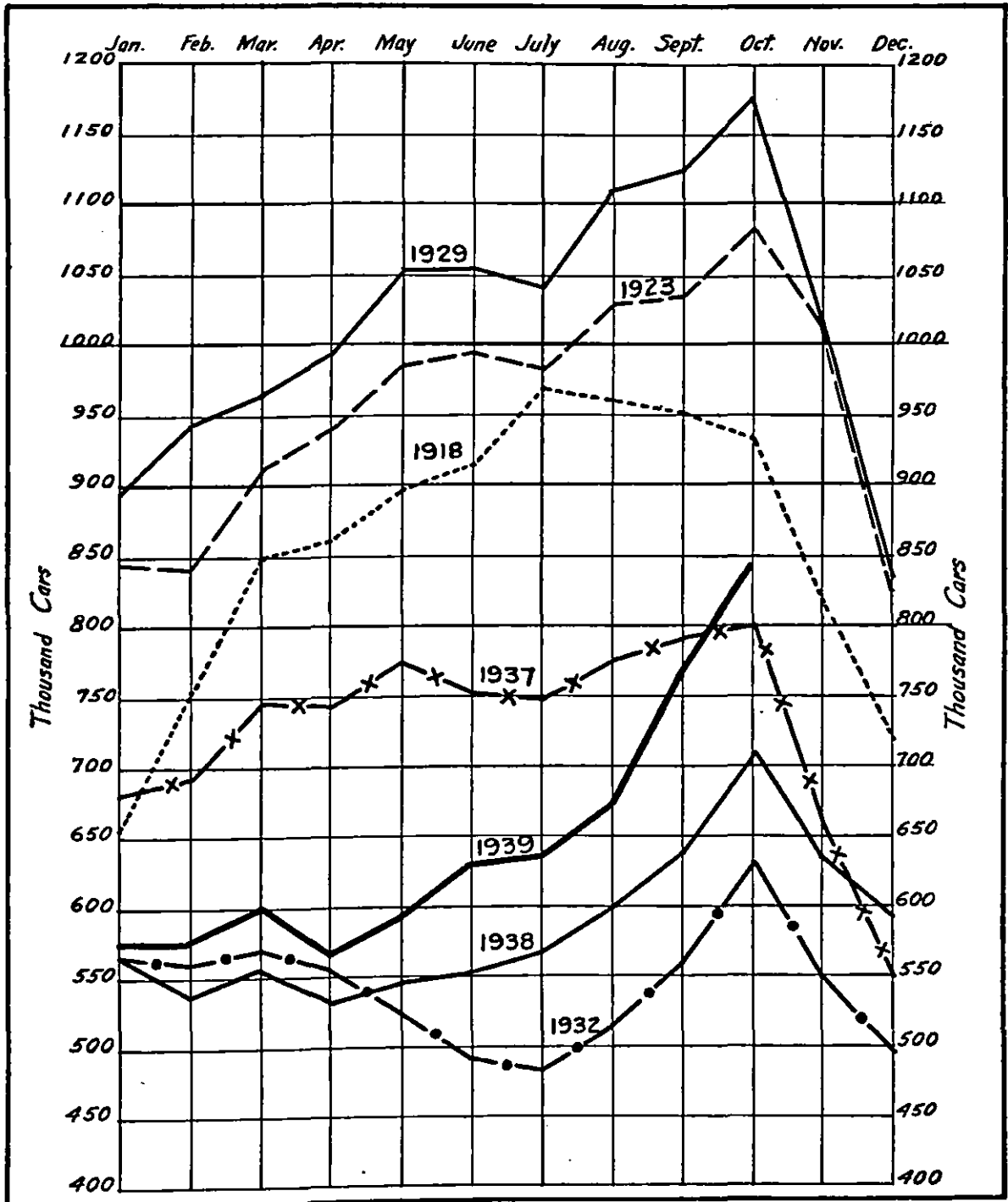


**CHART 10**  
Average Load Per Car Originated—Carload Traffic

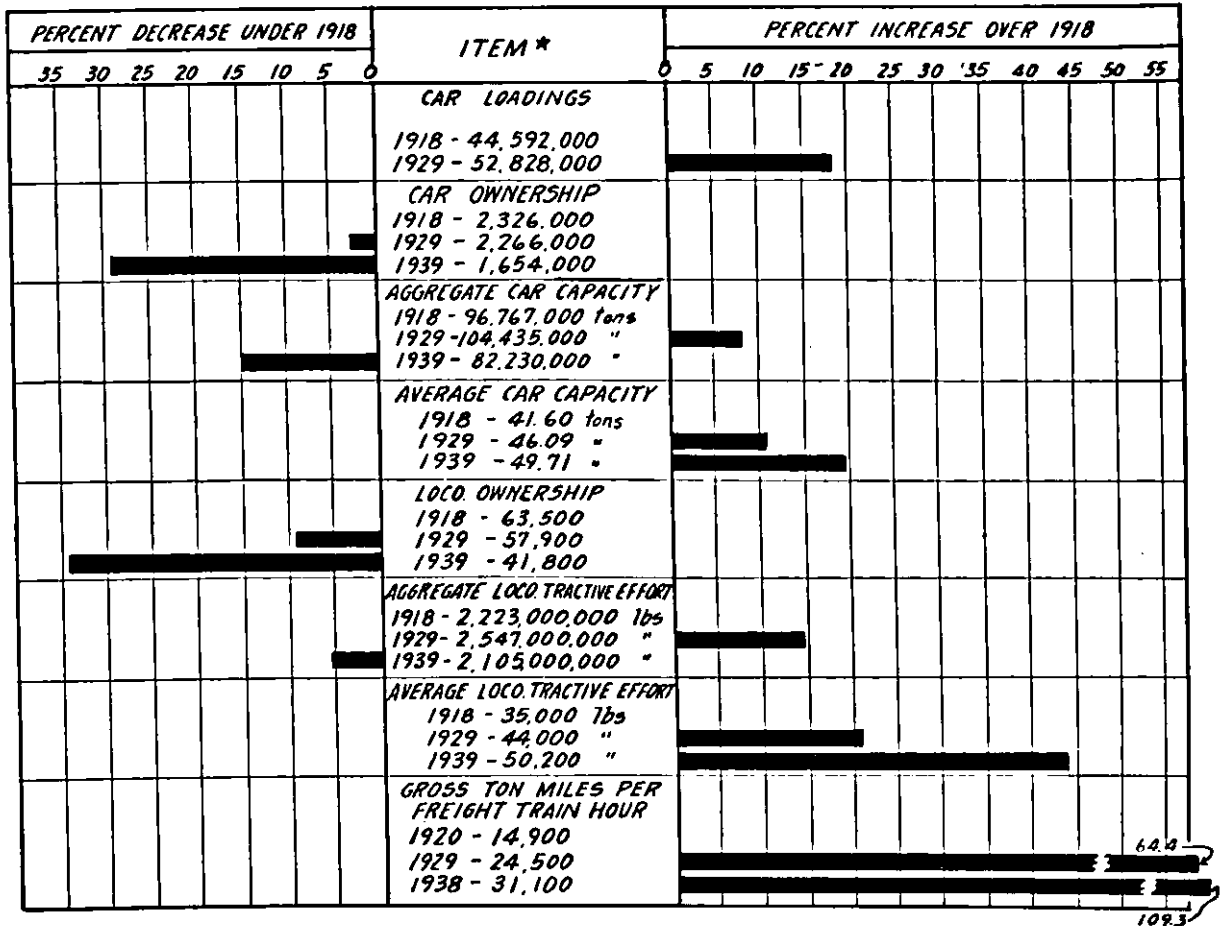


# CHART 11

## Cars of Revenue Freight Loaded—Weekly Average



**CHART 12**  
**Traffic and Equipment**

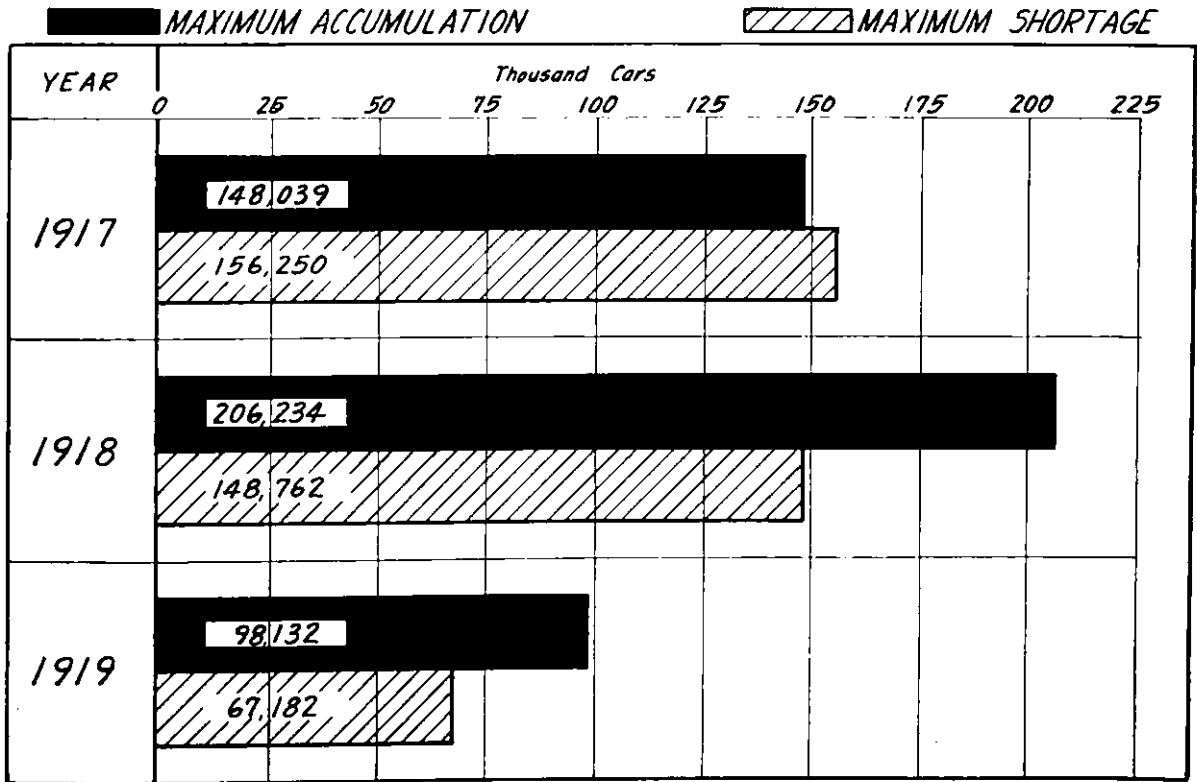


\* All figures as of July 1 except car loadings and gross ton miles per freight train hour.



CHART 13

Accumulation of Loaded Freight Cars and Shortage of Empties for Loading



**CHART 14**  
Volume of Freight and Passenger Traffic

<b>CARLOADINGS</b>	
1916	48,100,000*
1917	46,800,000*
1918	44,592,089 7% UNDER 1916
<b>TONS ORIGINATED</b>	
1916	1,203,367,000
1917	1,264,016,000
1918	1,263,344,000 5% OVER 1916
<b>REVENUE TON MILES</b>	
1916	362,444,000,000
1917	394,465,000,000
1918	405,379,000,000 12% OVER 1916
<b>TOTAL PASSENGER MILES</b>	
May 1917 to Dec 1919	118,035,000,000
<b>TROOP PASSENGER MILES</b>	
May 1917 to Dec. 1919	7,000,000,000 OR 6% OF THE TOTAL

\* Actual carloadings not reported. Estimated on basis of tons per loaded car mile.

**CHART 15**  
Carload Traffic Study (Cars of Revenue Freight Loaded—52 Weeks)

<b>AVERAGE 8 YEARS</b> 1923 - 1930 (NORMAL PROSPERITY)	50,575,000
<b>AFTER DEDUCTION</b> OF 10% LOSS DUE TO DIVERSION OF TRAFFIC	45,517,000
<b>AND</b>	
<b>INCREASE OF</b> 3,400,000 CARLOADS EQUIVALENT TO A WAR LOAD INCREASE OF 12% IN REVENUE TON MILES	48,917,000

CHART 16

ORGANIZATION CHART - ASSOCIATION OF AMERICAN RAILROADS

-NOVEMBER 1939-

27

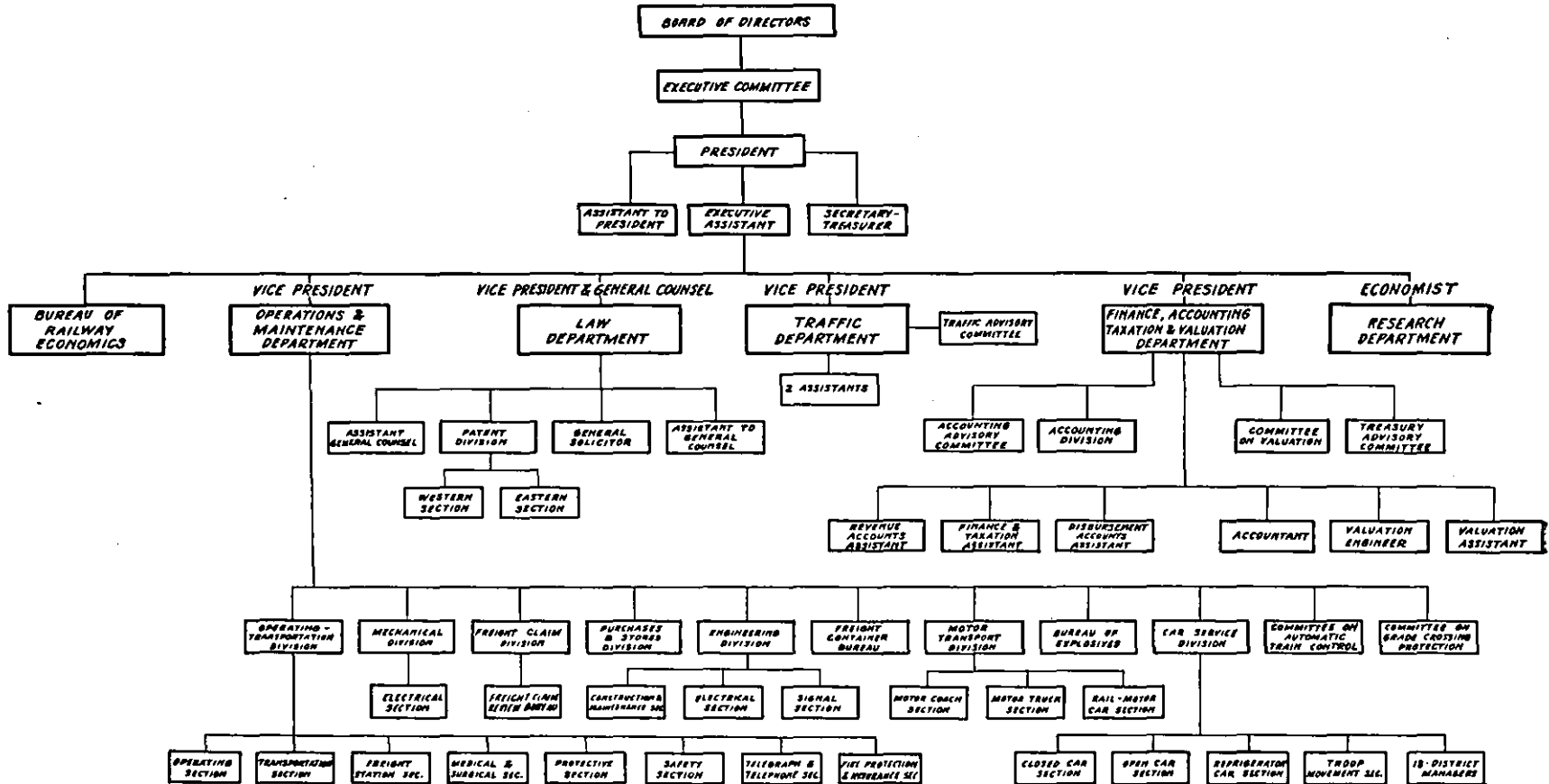
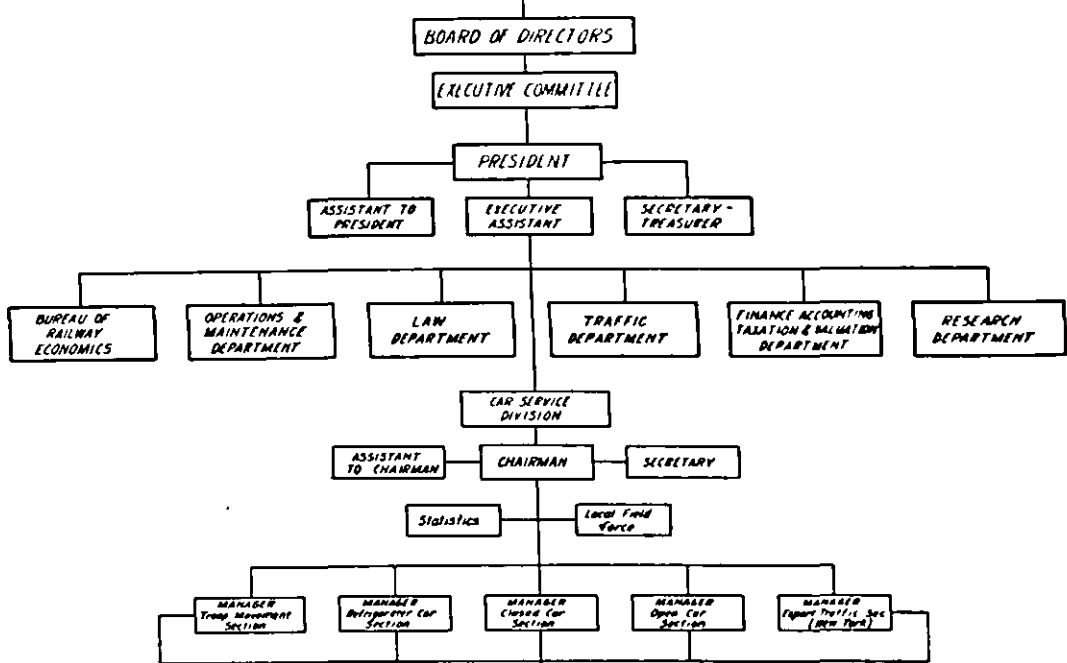


CHART 17

ORGANIZATION OF THE CAR SERVICE DIVISION  
ASSOCIATION OF AMERICAN RAILROADS



CORPS AREA HEADQUARTERS

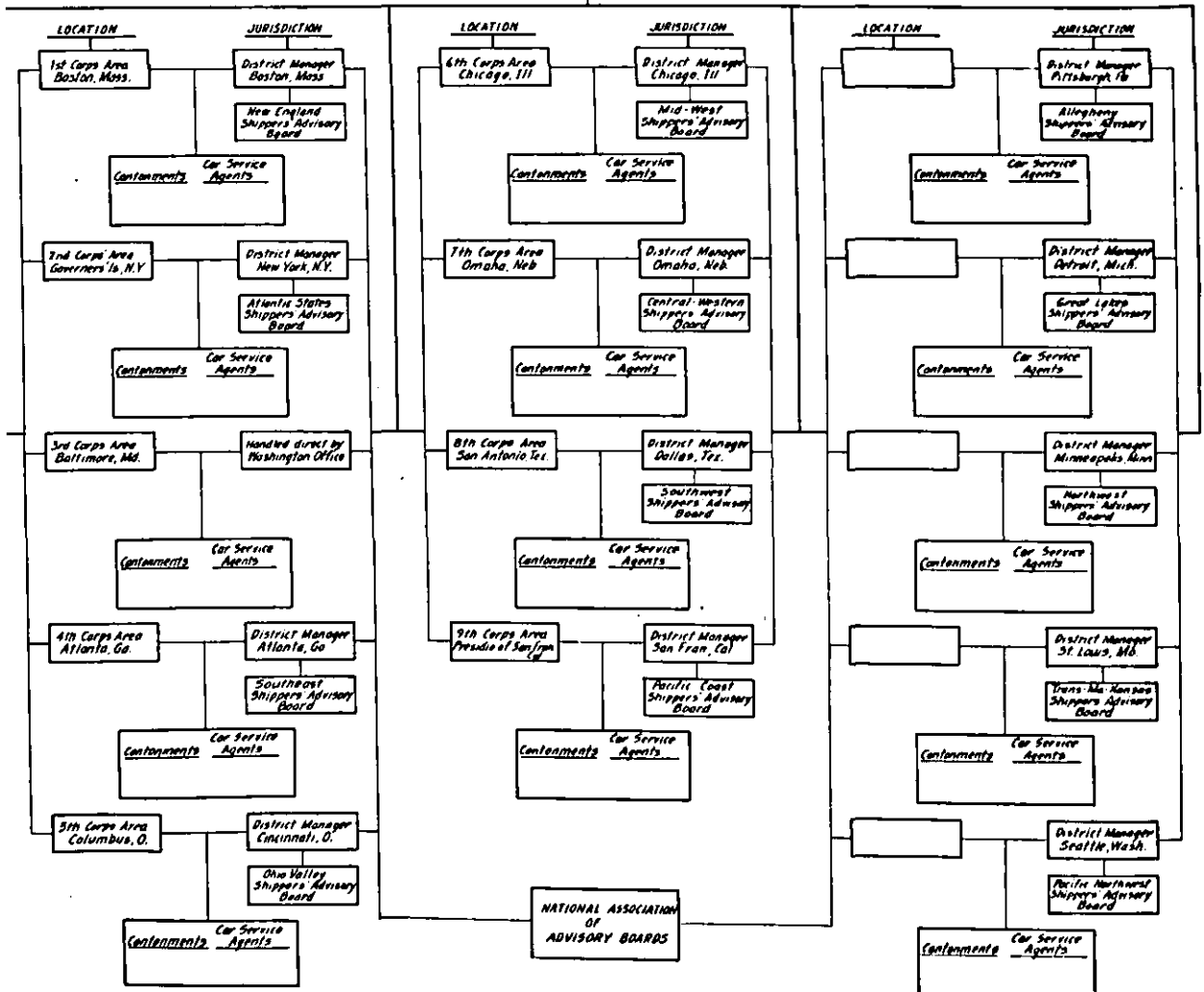
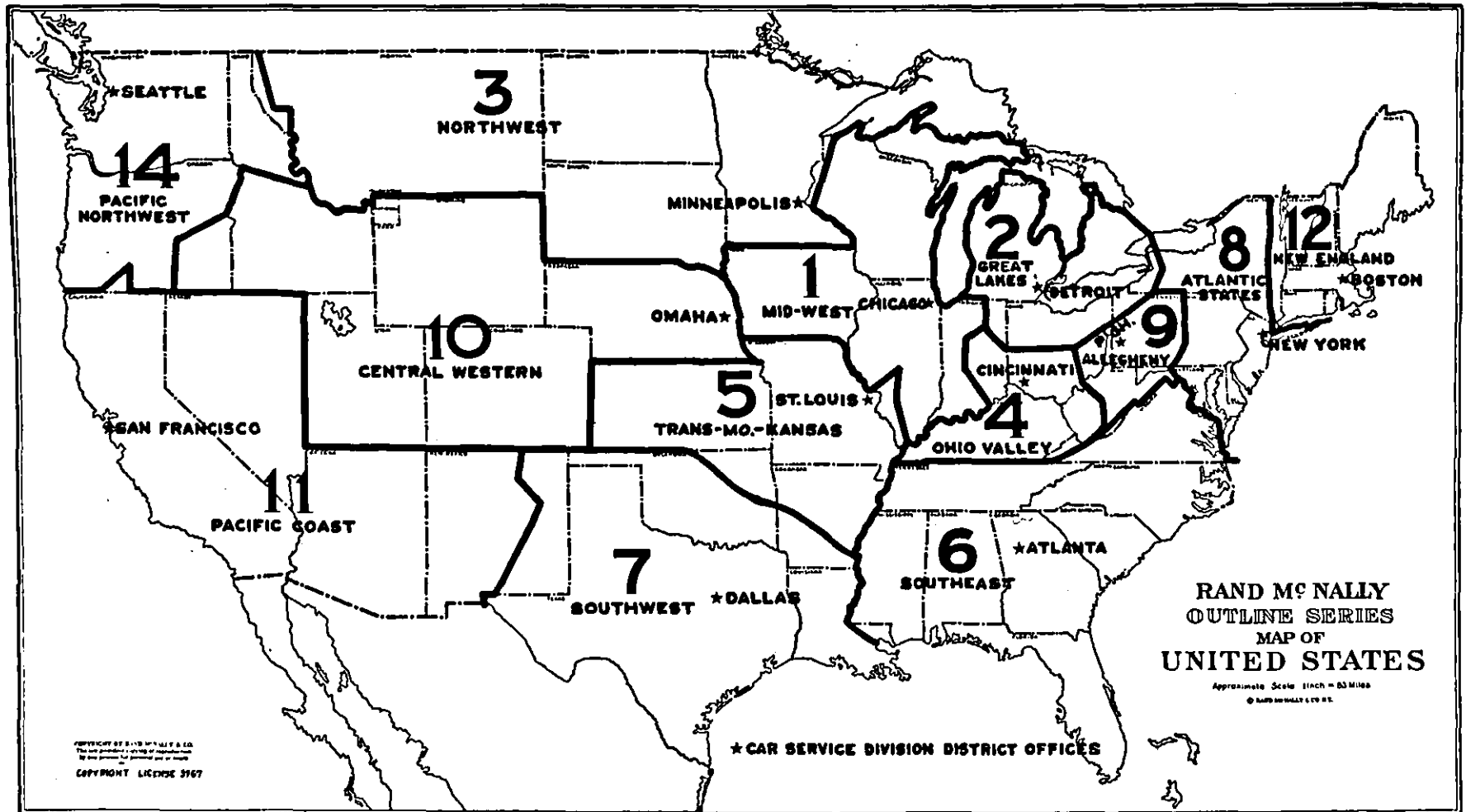


CHART 18

Territorial Extent of Car Service Division District Offices and Regional Shipper's Advisory Boards



## APPENDIX II

### Plan of Organization and Principal Activities of the Association of American Railroads

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#### PLAN OF ORGANIZATION

With Amendments Made November 7, 1936, and November 19, 1937

In order to promote trade and commerce in the public interest, further improve railroad service and maintain the integrity and credit of the industry, the Railroad Companies of the United States do hereby establish an authoritative national organization which shall be adequately qualified and empowered in every lawful way to accomplish said ends where concert of policy and action are required. For the purpose of facilitating the realization of this constructive object, the Members do hereby declare that these announced policies shall be authoritative and will be supported.

**ARTICLE 1.** (a) The organization shall be styled The Association of American Railroads, hereinafter called the Association. It is created to deal expeditiously and effectively with all matters of general interest to the industry, within the scope of the foregoing preamble.

(b) The existing regional organizations known, respectively, as

Eastern Presidents' Conference,  
Western Association of Railway Executives,  
Southeastern Presidents' Conference,

and their related or subordinate associations and organizations will preserve their identities and activities, cooperating with the Association.

**ARTICLE 2.** In addition to carrying out the purposes stated in the preamble hereof, the object is to coordinate the activities of the several associations dealing, directly or indirectly, with subjects connected with the American railroads.

**ARTICLE 3.** (a) All American steam railroads, except those operating less than one hundred miles of road, including trackage rights, and except those operated primarily as plant facilities, shall be eligible to membership. The Board of Directors may admit to membership railroad, switching or terminal companies with annual operating revenues in excess of one million dollars.

(b) The Board of Directors may admit to the Association as Associate Members without voting rights, carriers which, in the judgment of the Board, are not eligible for full membership as provided in Article 3 (a). The Board shall fix a flat rate for the annual dues of Associate Members, not subject to the further assessment provided in Article 20.

**ARTICLE 4.** (a) The general supervision and control of the affairs of the Association shall be committed to a Board of Directors, to be selected annually by the railroad members of the Association, who shall hold office for one year or until their successors are elected.

(b) The Board of Directors shall consist of eighteen members: seventeen railroad Chief Executives (President, Chairman, Chairman of the Board, Vice Chairman of the Board, Trustee, Receiver, Chief Executive Officer)—six from Eastern Territory, including New England; seven from Western Territory; and four from Southern Territory—and the President, who shall be ex-officio Chairman of the Board of Directors.

(c) The Board of Directors shall elect the officers of the Association, and fix their compensation and the terms of their employment.

(d) The Board of Directors shall meet regularly each month at a time and place

to be designated by the Board. Special meetings of the Board may be called by the President, or, upon request of not less than three members of the Board, shall be called, at a time other than the stated period. A majority of the Board of Directors shall constitute a quorum for the transaction of business, but a vote of the majority of the Board is required for decision. On a controversial question a three-fourths vote of the Board shall be necessary to a decision. Any member of the Board may declare a question controversial. No decision shall be reached nor any order made against any railroad company with respect to any controversial question without notice and opportunity to be heard.

(e) The Board of Directors shall determine the policies and control the activities of the Association.

(f) If any road or group of roads, members of the Association, shall object to any decision of the Board of Directors, the road or group of roads so objecting shall have the right to submit the question or questions at issue to arbitration as hereinafter provided in Article 19.

**ARTICLE 5.** The Board of Directors shall appoint annually an Audit Committee of accounting officers, one of whom shall be Chairman, whose duty shall be to make a complete audit of the accounts of the Association at such time or times as it may be deemed proper, and shall make report annually to the Board of Directors.

**ARTICLE 6.** (a) There shall be an annual meeting of the members, and the Board of Directors shall designate the time and place thereof. At this meeting there shall be submitted a report of the activities of the Board of Directors during the preceding year, and there shall be elected a Board of Directors for the ensuing year. Special meetings of the members may be called by the Board of Directors at any time.

(b) Not less than 30 days prior to the Annual Meeting of the Members of the Association, the Eastern Presidents' Conference shall nominate six persons, the Western Association of Railway Executives seven persons, and the Southeastern Presidents' Conference four persons, all of whom shall be Chief Executive Officers (as defined in Article 4, paragraph (b) hereof) of Member Roads, to be voted for at the Annual Meeting as Directors of the Association. Any member-road may make other nominations. Vacancies occurring during the year shall be filled by the Board for the unexpired term.

**ARTICLE 7.** (a) There shall be an Executive Committee consisting of members of the Board of Directors to be selected by the Board. The Board shall have power from time to time to fix the number of members of the Executive Committee, but there shall never be fewer than five nor more than seven members, except that in addition to the members selected by the Board the President of the Association shall be ex-officio a member and Chairman of the Executive Committee.

(b) The Executive Committee shall be considered as being continuously in session, and the members thereof shall give to the affairs of the Association such time as may be necessary.

(c) During the interval between meetings of the Board of Directors, the Executive Committee shall possess and may exercise all the powers of the Board, reporting its action to the next meeting of the Board for approval.

(d) The Executive Committee shall interest itself in matters affecting the railroad industry and shall recommend to the Board of Directors and to the Members such constructive policies as will promote efficiency and economical operation. Whenever requisite, it will accompany its recommendations with suggested rules and regulations to insure the execution of the determined policies.

**ARTICLE 8.** The officers of the Association shall be—

President;  
Five Vice-Presidents, one of whom shall be the General Counsel;  
Associate General Counsel; General Solicitor;  
Secretary-Treasurer.

**ARTICLE 9.** (a) To the end that the business of the Association may be economically and efficiently conducted, and its service to the American railroads effectively

performed, the Association establishes departments to be administered under executive supervision, as herewith set forth, to wit:

- I. Law
- II. Operations and Maintenance
- III. Traffic
- IV. Finance, Accounting, Taxation and Valuation
- V. Planning and Research

(b) Each of the Departments provided for in this article shall be under the direct supervision of a Vice-President of the Association. The Vice-President of the Law Department shall serve also as General Counsel. The work of the several Departments may be subdivided into such divisions as the Vice-President in charge may direct, with the approval of the President and the Board of Directors.

(c) Anything in this Plan to the contrary notwithstanding, the Board of Directors shall have power to transfer to any other Department any activity herein assigned to a particular Department.

ARTICLE 10. (a) The President shall exercise general supervision over the affairs of the Association and shall preside over meetings of the Board of Directors, the Executive Committee and the Members. He shall perform such other duties as shall be assigned to him by the Board of Directors. In the absence or disability of the President, a Vice-President of the Association, to be designated by the Executive Committee, shall discharge the duties of the President.

(b) The President shall have power to appoint such subordinates, assistants and clerical employes as may be necessary for proper conduct of the work of the Association; all subject to the approval of the Board of Directors. No bills shall be incurred without the approval of the President or a Vice-President.

ARTICLE 11. The Law Department shall deal with questions of legislation, governmental action and policies, and matters of a legal nature which, in the opinion of the Board of Directors or of the Executive Committee, will affect the members of the Association, and with such other matters of a related nature as may be referred to it by the President.

ARTICLE 12. The Operations and Maintenance Department shall deal with all matters pertaining to Operating, Car Service, Transportation, Equipment, Telephone and Telegraph, Signaling, Maintenance and Construction Engineering, Mechanical, Purchases and Stores, Inspection, Freight Claims and such other matters of a related nature as may require attention or may be referred to it by the President.

ARTICLE 13. The Traffic Department shall deal with all matters of a traffic nature, both freight and passenger, and such other matters of a related nature as may require attention or may be referred to it by the President.

ARTICLE 14. The Finance, Accounting, Taxation and Valuation Department shall deal with all phases of Accounting, Financial and Taxation activities and such other matters of a related nature as may require attention or may be referred to it by the President.

ARTICLE 15. The Planning and Research Department shall absorb the work of the Bureau of Railway Economics and have charge of research problems affecting carriers, and shall provide properly digested information for other Departments. It shall be the source of fundamental technical information and shall deal with all matters pertaining to the analysis and study of all phases of transportation operations, with special attention to improvements in present methods and practices, and research leading to the correlation of all forms of competitive transportation, pure and applied science, materials and construction, special statistics and reports, and with such other matters of a related nature as may require attention or may be referred to it by the President.

ARTICLE 16. In each of the Departments under the direction of the Department Vice-President there shall be appointed such Committees as may be deemed necessary for the subjects to be covered and the activity required upon these subjects. The members shall be selected from the various geographical sections of the country to insure



adequate representation of the experience and practice of the Member Roads. They shall give such cooperative action to other committees as may be required.

ARTICLE 17. The Secretary-Treasurer shall be responsible for the funds of the Association, shall receive, disburse and account for all monies received and expended, shall make monthly reports of the finances to the Board, and shall give such bond as the Board of Directors may direct. He shall also keep a full and complete record of proceedings of all meetings of the Members, of the Board of Directors and of the Executive Committee, and perform such other duties as may be assigned to him by the President or the Board of Directors. He shall deposit the funds of the Association in such bank or banks as may be designated by the Board of Directors.

ARTICLE 18. (a) Standards, rules, regulations and decisions of the Association shall be promulgated under the direction of the President, subject to the approval of the Executive Committee.

(b) Standards, rules and regulations may be established by the Member Roads by majority vote at any regular or called meeting or by letter ballot as the exigencies of the occasion may demand. The voting power of the Members of the Association shall be, in questions affecting physical property, proportionate to the ownership of equipment or miles of track, whichever may be applicable.

ARTICLE 19. (a) It is hereby declared to be the policy of the Association that all controversies between Members of the Association should be settled by arbitration, and the Members of the Association agree that in any controversy over which the Board of Directors has assumed jurisdiction and which it has decided by the affirmative vote of three-fourths or more of its members, they will accept and carry out such decision or, within twenty days, institute arbitration proceedings as hereinafter provided.

(b) Whenever it is necessary to arbitrate a controversy between the Board of Directors of the Association and a Member or group of Members, arbitrators shall be selected in the manner following: The Member or group of Members demanding arbitration shall select one or three arbitrators and shall notify the President of the Association of such action. Within twenty days after the receipt of such notice, the President of the Association shall select one or three arbitrators and shall notify the opposite party of such action. Within twenty days thereafter, the arbitrators shall meet and select one or three additional arbitrators. If, within the said period of twenty days, there shall be a failure by the previously selected arbitrators to select such additional arbitrator or arbitrators, the presiding Judge of the Federal Circuit Court of Appeals of the circuit which includes the home office of the Member demanding arbitration (or the home office of the Member with the largest road-mileage demanding arbitration, if there be more than one Member party to the arbitration) shall be requested to appoint, within twenty days, the additional arbitrator or arbitrators.

(c) The Association shall adopt rules to be followed with respect to the admissibility of evidence, the filing of briefs, the hearing of argument and all other matters affecting practice and procedure.

(d) Within sixty days after a case has been submitted, the arbitrators shall render their decision and make their award, and such award, including an award involving the payment of money, shall be conclusive and binding upon the parties to the controversy. The decision and award of a majority shall constitute the decision and award of the arbitrators.

(e) The cost and expense of arbitration, as determined by the arbitrators, in each specific submission for arbitration, shall be borne in such proportions as shall be fixed by the arbitrators.

(f) Where there exist means for the settlement of disputes in organizations to be brought under the Association such rules and regulations may be continued, unless otherwise ordered by the Board of Directors or the Executive Committee.

ARTICLE 20. The expenses of the Association shall be met by assessments made by the Board of Directors and approved by the Member Roads based upon the operating revenues of the railroads members of the Association, the period selected to be determined by the Board of Directors.

ARTICLE 21. On all questions which come before the Members for decision the voting shall be in proportion to operating revenues, except as herein otherwise specifically provided.

ARTICLE 22. Attached, as Exhibit "A," is a form of Contract under which all Members will agree to the above provisions and which they will be required to enter into at the time of signifying their intent to become members of the Association; provided that Members in receivership or trusteeship may, if they so elect, execute a Contract in the form of Exhibit "B," hereto attached, in lieu of Exhibit "A."

ARTICLE 23. The principal office of the Association shall be in the City of Washington, D. C., but, subject to the approval of the Board of Directors, branch offices may be established in the cities of New York and Chicago, and elsewhere as required.

ARTICLE 24. This Plan shall become effective upon a date to be fixed by the Board of Directors after three-fourths of the mileage of the railroads now belonging to the American Railway Association and the Association of Railway Executives shall signify their assent thereto.

ARTICLE 25. The provisions of this Plan may be amended or modified at any time by a three-fourths vote of the membership, each Member casting its vote in proportion to operating revenues.

September 21, 1934.

### Exhibit "A"

The undersigned hereby signifies assent to the Plan of Organization of The Association of American Railroads as set out in the attached Plan dated September 21, 1934, and by executing this paper becomes a member thereof, covenanting with all the others who shall sign a counterpart hereof to be bound by the provisions of the said Plan, so long as the undersigned shall remain a member of the Association, reserving the right, however, to cease to be a member upon the expiration of ninety days after giving written notice of intention to withdraw from membership; provided that the undersigned, if it withdraws from membership, shall nevertheless be responsible for its proper proportion of obligations incurred while it was a member.

..... R.R.  
By .....

Date.....

### Exhibit "B"

Having first received specific authorization of the.....  
..... Court so to do, the undersigned Trustees (Receivers) of the  
..... Railroad Company hereby signify assent  
to the Plan of Organization of The Association of American Railroads as set out in the  
attached Plan, dated September 21, 1934, and by executing this paper become members  
thereof, covenanting with all the others who are and shall become members to be bound  
by the provisions of the said Plan so long as the undersigned shall remain members of  
The Association of American Railroads, reserving the right, however, to cease to be  
members upon the expiration of ninety (90) days after having given written notice  
of their intention to withdraw from membership; provided, that if the railroad repre-  
sented by the undersigned withdraws from membership, it shall nevertheless be re-  
sponsible for its proper proportion of obligations incurred while it was a member; and  
provided, however, that any action of The Association of American Railroads, its  
Directors, Executive Committee, officers, agents, employees, and committees shall, as to  
the undersigned Trustees (Receivers) and the properties under their charge, be subject  
to the approval of the Court having jurisdiction over said Trustees (Receivers) and  
the property being administered by them; and said Trustees (Receivers) shall not be  
obliged to submit any matter or issue to arbitration as provided in said Plan unless and  
until they first receive the authority of said Court so to do.

.....  
.....  
Trustees (Receivers)

**Resolution Adopted by Member Roads of the Association of Railway Executives and the American Railway Association at a Joint Meeting Held in Chicago, Illinois, on September 21, 1934**

WHEREAS, at a joint meeting of the Member Roads of the Association of Railway Executives and the American Railway Association, duly called as provided in the respective Articles of Association of the two organizations, there was submitted to the membership of both Associations a proposed plan for consolidating the two Associations and certain other Associations and organizations into the Association of American Railroads, hereinafter sometimes called the Association, which proposed plan has been approved and recommended to the Member Roads of both Associations by the Advisory Committee of the Association of Railway Executives and the Board of Directors of the American Railway Association, respectively; and

WHEREAS, the roads constituting the American Railway Association have heretofore established and have for many years maintained a statistical and research organization known as the Bureau of Railway Economics; and

WHEREAS, the said railroads constituting the American Railway Association have heretofore established and have for many years maintained an organization known as the Railway Accounting Officers Association for the purpose of organizing and conducting more efficiently the accounting departments of the carriers, unifying and standardizing railroad accounts, interchanging ideas and experience among its members, and otherwise benefiting the railroads members thereof within the scope of the Association; and

WHEREAS, the Plan contemplates that the Bureau of Railway Economics and the Railway Accounting Officers Association shall likewise be consolidated with and become a part of the Association of American Railroads; Therefore,

RESOLVED, That the said Plan creating the Association of American Railroads be and the same is hereby approved and adopted.

BE IT FURTHER RESOLVED, That John J. Pelley, F. E. Williamson, W. W. Atterbury, Daniel Willard, John J. Bernet, C. R. Gray, Hale Holden, L. W. Baldwin, Fred W. Sargent, H. A. Scandrett, Ralph Budd, Fairfax Harrison, L. A. Downs and W. R. Cole are hereby elected as the first Board of Directors of the Association to hold office until their successors are elected and assume office as provided in the Plan.

BE IT FURTHER RESOLVED, That all roads members of the Association of Railway Executives, of the American Railway Association, of the Bureau of Railway Economics and of the Railway Accounting Officers Association which by voting for this Resolution shall signify their assent to the Plan, and any Member Roads which shall hereafter signify their assent, are requested as promptly as possible to execute an agreement substantially in the form designated as Exhibit "A" or Exhibit "B" to the said Plan, as the case may be, and to mail the same when duly executed to the Vice-Chairman of the Association of Railway Executives at Washington, D. C.; and that when the said Vice-Chairman has received a sufficient number of the said agreements to indicate that three-fourths of the mileage of the roads now belonging to the American Railway Association, the Association of Railway Executives, the Bureau of Railway Economics and the Railway Accounting Officers Association have assented to the said Plan, he shall promptly give notice to the Board of Directors and shall at the same time call a meeting of the said Board of Directors to complete the organization of the Association. At such meeting the said Board of Directors shall fix a date upon which the Plan shall become effective. The present Association of Railway Executives, American Railway Association, Bureau of Railway Economics and Railway Accounting Officers Association shall continue in their present activities until the date so fixed by the Board of Directors, but upon said date the said four existing organizations, to wit, the Association of Railway Executives, the American Railway Association, the Bureau of Railway Economics and the Railway Accounting Officers Association, shall deliver to the Association of American Railroads all their funds, records, files, correspondence and property of every kind, title to which shall by said delivery vest in the said Association of American Railroads, and thereafter the said four existing organizations shall cease to exist and shall be merged into the said Association of American Railroads.

BE IT FURTHER RESOLVED, That from and after the said date when the said Plan shall become effective, all contracts, agreements and arrangements of whatever character to which the said Association of Railway Executives, the said American Railway Association, the said Bureau of Railway Economics and the said Railway Accounting Officers Association are parties are hereby assigned and transferred to the Association of American Railroads, it being the purpose and intention of this Resolution to substitute the Association of American Railroads for the Association of Railway Executives, the American Railway Association, the Bureau of Railway Economics and the Railway Accounting Officers Association in, and that the Association of American Railroads shall assume, all agreements, contracts and arrangements which have been entered into with roads members of the four organizations herein merged and/or with any party or parties not members thereof.

BE IT FURTHER RESOLVED, That the Board of Directors of the Association of American Railroads be and the same is hereby authorized to enter into such agreements and arrangements as may be necessary to bring into the Association of American Railroads any other railroad organizations within the scope of the Plan as hereby adopted, upon such terms as may be fair and equitable, reporting their actions, if any, in this respect to the roads members of the Association of American Railroads.

Any railroad eligible for membership in the Association, not signifying its assent to the Plan by voting for this Resolution, may nevertheless become a member of the Association by signifying its assent to the Plan and executing and delivering to the Secretary-Treasurer of the Association an agreement substantially in the form designated as Exhibit "A" or Exhibit "B" to the said Plan, as the case may be.

### Resolution Adopted by Board of Directors, Association of American Railroads, October 12, 1934

WHEREAS, at a joint meeting of the Member Roads of the Association of Railway Executives and of the American Railway Association held in Chicago on September 21, 1934, a resolution was adopted approving the Plan of Organization of the Association of American Railroads; and

WHEREAS, the said Plan provides that it shall be effective upon a date to be fixed by the Board of Directors after three-fourths of the mileage of the railroads now belonging to the American Railway Association and the Association of Railway Executives shall signify their assent to the Plan; and

WHEREAS, the railroads belonging to the said two Associations have an aggregate mileage of 296,869.03 miles; and

WHEREAS, by resolution adopted at the said meeting by the roads members of the said two Associations it was provided that railroads assenting to the Plan should signify their assent by executing an agreement substantially in the form designated as Exhibit "A" or Exhibit "B" to the said Plan and mail the same to the Vice-Chairman of the Association of Railway Executives; and

WHEREAS, the said Vice-Chairman has certified to the Board of Directors that railroads having an aggregate mileage of 248,512.54 miles have filed with him their assents in the way provided by the said resolution; and

WHEREAS, it now appears that more than three-fourths of the mileage of the railroads belonging to the American Railway Association and the Association of Railway Executives have signified their assent to the Plan; Therefore, Be It

RESOLVED, That the Plan is hereby declared to be effective and the Association of American Railroads declared to be in existence from and after the hour of 10 a. m., Friday, October 12, 1934, from and after which time the Association of Railway Executives, the American Railway Association, the Railway Accounting Officers Association and the Bureau of Railway Economics shall cease to exist as independent organizations and shall be merged into the Association of American Railroads; provided, however, that the officers and employes of the American Railway Association, the Association of Railway Executives, the Bureau of Railway Economics and the Railway Accounting Officers Association shall continue to discharge their existing functions and duties until

otherwise directed by the chief executive of the Association of American Railroads; and provided further, that the Bureau of Railway Economics shall continue under that name as a bureau or division of the Association of American Railroads until the further orders of the said chief executive.

BE IT FURTHER RESOLVED, That from and after October 12, 1934, all the funds, records, files, correspondence and property of every kind belonging to the Association of Railway Executives, the American Railway Association, the Bureau of Railway Economics and the Railway Accounting Officers Association shall be delivered to, and title to which shall vest in, the Association of American Railroads.

## PRINCIPAL ACTIVITIES OF THE ASSOCIATION

Almost every phase of railroading is touched by the work of the Association of American Railroads. In the one field of movement of freight between two or more railroads, for example, the Association, through its appropriate divisions, has set up and maintains the standards which make equipment suitable for wide interchange; directs the daily flow from railroad to railroad of freight cars, loaded and empty, or marshals fleets of cars to meet peak demands, such as the movement of a great crop, or coping with a great disaster; establishes and maintains the basis on which cars away from "home" are repaired, and on which such repairs are paid for; arranges rules for the remittance to each road concerned of its proper share of the revenue collected; and determines how claims for loss and damage, if any, shall be paid and apportioned among the different railroads concerned.

In addition to these and like activities in almost every aspect of the day-by-day operation of railroads, the Association of American Railroads continues the joint research on common problems which has been going on for more than half a century.

At the present time, for example, in a laboratory at the University of Illinois operated jointly by the Association and the steel companies, experiments are going on to make steel rail stronger and tougher. At the same laboratory, testing machines operating under controlled conditions simulate the stresses set up in track under rolling traffic, while at Elkton, Maryland, at Valparaiso, Indiana, and at Ancona, Illinois, special measuring devices are installed under sections of track to register performance under actual traffic. All over the country, electric "detector" cars, developed with the cooperation of the Association, are "feeling" with magnetic fingers for defects hidden within rails.

In a laboratory at Purdue University, maintained and operated by the Association, tests are being made constantly on such parts of equipment as couplings, draft gear, and brakes. It was here that the railroads and the air brake companies, jointly, carried on the laboratory tests which led to the development of the new and improved AB freight car brakes. At the University of Maryland, a joint investigation into the behavior of boilers is being carried on by the railroads, the steam boiler manufacturers and the United States Bureau of Mines.

On a stretch of track in Pennsylvania, the Association of American Railroads is trying out with a test train the merits of a dozen new types of freight car trucks. Car wheels, freight and passenger, are being tested in laboratories at Chicago and Gary, Indiana, and axles at Canton, Ohio. All over the country, freight cars of increased capacity and reduced weight, developed by the Association, are in test operation.

All these are but part of the research carried on by the railroad industry in the development of better, safer and more economical transportation. In addition, the railroads participate in the research carried on by many of the producers of the 70,000 different items of materials and supplies which railroads use. Altogether, 267 committees in the various departments of the Association are at work on a great variety of problems in the production of continually better transportation.

The railroads of the United States, Canada and Mexico which are members of the Association represent 96 per cent of the mileage in those countries, and 99 per cent of the business done by railroads. Numerous other railroads in North America and all over

the world are associate members, receiving the benefit of the reports of the Association's technical and research committees.

The member roads of the Association elect annually a Board of Directors of seventeen railroad chief executive officers. The President of the Association is an ex-officio member of the Board.

Headquarters of the Association, and the offices of the president, the secretary-treasurer and the vice-presidents in charge of its departments, are in Washington, D. C.

The principal activities of the divisions and sections which make up each department follows:

## OPERATIONS AND MAINTENANCE DEPARTMENT

The department is organized in seven divisions, two bureaus, and two special committees, dealing with various phases of railroad operations as follows:

### Operating-Transportation Division (Headquarters, Chicago)

*The division is organized in eight sections, as follows:*

**OPERATING SECTION, New York.** Organized in 1884 as a committee of the "General Time Table Convention" to prepare a Standard Code of Train Rules. Became the Operating Division in January, 1919. The principal work of this section is the preparation, revision and interpretation of the Standard Codes of Rules for Train Operations, Block Signals and Interlocking. These codes are the fundamental basis for such rules on practically every railroad in the country. The section also deals with rules covering handling of interline baggage.

**TRANSPORTATION SECTION, Chicago.** Deals with rules and regulations governing car service, demurrage and storage, and also with rules and rates governing payment by a railroad for use and detention of cars not owned by that road. It assigns "reporting marks" by which cars and other equipment used in interchange are identified and recorded. The Official Railway Equipment Register, issued quarterly, contains detailed information concerning the nearly 2,000,000 cars regularly used in interchange service.

**FREIGHT STATION SECTION, Chicago.** Organized in 1888 as the American Association of Freight Agents, which became part of the American Railway Association in 1920. Deals with the wide range of problems of local freight agents; interchanges ideas as to methods of freight station work; and acts as a point of contact between committees of local agents in practically every large city in the country.

**MEDICAL AND SURGICAL SECTION, New York.** Organized 1920. Deals with matters of health affecting railroad employees and railroad operations. Prepares recommended physical standards for railroad employees, particularly for those concerned with the operations of trains, providing for periodic physical examinations to increase efficiency and lengthen normal period of service. It was among the first organizations to make concerted efforts to combat venereal diseases in cooperation with the public health authorities.

**PROTECTIVE SECTION, New York.** Organized 1919 as the American Chief Special Agents and Chiefs of Police Association. Deals with the police protection of railroad passengers, shipments and property. A major accomplishment in recent years has been the reduction in losses from theft and robbery of railroad shipments from approximately ten million dollars in 1921 to one-half million dollars in 1938. The section also seeks, in cooperation with the Safety Section, to reduce loss of life and limb among trespassers on railroad trains and property, particularly through a campaign of education to discourage children from playing on the right of way, "hopping" rides on freight trains, and other dangerous practices.

**SAFETY SECTION, New York.** Organized 1921 as Safety Section, American Railway Association. Organized efforts are carried on by this section for railroad safety—safety for passengers, employees and trespassers, and safety at grade crossings. Its

work is educational, preventive and statistical. Some of the results are indicated by the fact that the rate of accidents to employees and passengers is now only about one-fourth as high as the rate when organized safety work started on the railroads. The general safety record for 1938 was the best on record, with fewer train accidents, in proportion to the number of miles run, than ever before, and with a lower general rate of casualties. The "Cross Crossings Cautiously" campaign for prevention of accidents at grade crossings, originated by the Safety Section, has been carried on continuously for eighteen years, and the efforts of the section have played a prominent part in reducing the number of fatalities at grade crossings from 2,568 in 1928 (the peak year) to 1,517 in 1938.

**TELEGRAPH AND TELEPHONE SECTION**, New York. Organized 1882 as Association of Railroad Telegraph Superintendents. Deals with the development of suitable standards covering pole lines and wires, the installation and maintenance of telegraph and telephone equipment, design of circuits and telegraph and telephone operating practices, including the adoption of new means and methods for the advancement of the efficiency of the railroad telegraph and telephone service.

**FIRE PROTECTION AND INSURANCE SECTION**, New York. Organized 1913 as the Railway Fire Protection Association, which became a section of the Association of American Railroads in 1939. Its object is to promote interest in and approve methods of fire prevention and protection, and to circulate information on these subjects. It publishes a handbook for ready reference, and issues information and instructions dealing with fire protection and prevention and the allied subject of insurance.

### Engineering Division (Headquarters Chicago)

*The division is organized in three sections, as follows:*

**CONSTRUCTION AND MAINTENANCE SECTION**, Chicago. Organized in 1919 (carries on its work through the technical committees of the American Railway Engineering Association, which was organized in 1899). This section is engaged in establishing and improving standards, specifications and recommended practices relating to the design, construction and maintenance of railway tracks, bridges, buildings, tunnels, facilities for the servicing of locomotives and cars, water supplies and terminals.

The object of its work is to provide ways for the safe and expeditious movement of trains at minimum cost.

Original research and critical studies of innovations in practice developed by individual railroads have produced such results as the following:

A reduction of more than 50 per cent in cross-tie replacements, through improved practices in protecting wood from decay and wear; large savings in locomotive operation and maintenance, through refinements in the treatment of water for use in locomotive boilers; savings in the replacement of rails, frogs and crossings, through the repair of worn parts by welding; improvements in the design of rails and other elements of the track structure, as a result of the concrete information found in tests of the complex behavior of tracks under moving loads; economy in new and old bridges, due to more complete knowledge of the action of structures under train loads.

Among the research projects now in progress are those concerned with the cause and detection of hidden defects in rails, the effect of high-speed trains on tracks, the strength of welded joints for rails, the heat-treatment of rail ends to prevent wear, the behavior of track-joint bolts in service, the treatment of water to overcome the cracking of boiler shells, and the development of processes or materials designed to prevent the corrosion of track materials by the brine drippings from refrigerator cars.

**ELECTRICAL SECTION**, Chicago. Organized 1906. Deals with problems of design, installation and use of electrical apparatus along the roadway and structures of railroads. This includes transmission lines and catenary construction, track and third-rail bonds, clearances on electrified lines, substations, illumination of fixed properties, electric heating and welding, and the standardization of electrical apparatus and materials and their application to railway use. Collaborates with other technical organizations to effect a greater degree of standardization of electrical practices.

**SIGNAL SECTION, New York.** Organized 1895 as Railway Signaling Club. Deals with the development of improved standards of railway signal apparatus and practices which increase safety and reduce the cost of operations. Its work includes studies, reports and educational material on the economics of signaling; on interlocking, automatic block signaling, centralized traffic control, track signal circuits and the conditions which affect them; and on other technical problems.

### **Mechanical Division (Headquarters Chicago)**

Organized as the Mechanical Division on March 1, 1919, by amalgamating the former American Railway Master Mechanics Association (organized 1868) and the Master Car Builders (organized 1867). Deals with design, building, maintenance and repair, interchange and inspection of railroad mechanical equipment. In the year 1938, as an example, the division established or revised standards or recommended practices covering 27 different mechanical features of locomotives or cars. The division has built and operates, under test conditions, freight cars of various designs, materials and methods of fabrication, establishing new standards which are now in wide use. It now has under observation in experimental trial a large number of fusion-welded tank cars, and riveted aluminum tank cars. The division also conducts continuous tests of mechanical parts and devices at its laboratory at Purdue University, or, in conjunction with manufacturers, at other laboratories and testing plants. Research work is carried on under the direction of the division's research engineer.

The division is responsible for the mechanical rules governing interchange of freight cars among railroads, including standards of inspection and repair, and standard costs for work done by one railroad upon the "foreign" cars of another road.

The division is also responsible for mandatory rules governing the loading and securing of commodities on open top cars, rules governing the maintenance of air brake and train air signal equipment, and specifications for tank cars. It publishes a Manual of Standard and Recommended Practice for cars and locomotives; a Wheel and Axle Manual; a Tire Manual; and a Supplement to the Manual of Standard and Recommended Practice covering designs for Standard and Recommended Practice freight cars.

As a result of the standardization work of the division and its predecessor organizations, the number of sizes and kinds of freight car axles has been reduced from 56 to one standard design made in five sizes. Journal boxes have been reduced from 58 different kinds to one standard design, also made in five sizes, while 26 different sorts of car couplers, 20 different sorts of brake shoes and 27 different sorts of brake heads have been reduced to one standard design of each article.

The division also maintains a Mechanical Inspection Department to check the observance of the rules governing the interchange of cars. This inspection department conducts frequent investigations on all railroads and private car lines, and also conducts special investigations under the direction of the Arbitration Committee of the division.

The Arbitration Committee of the division adjusts all disputes arising under the Interchange Rules, the decision of the committee being final.

**ELECTRICAL SECTION, Chicago.** Organized 1937 as the Electrical Section of the Mechanical Division. Deals with the problems involved in the use of electricity on railroad equipment and mechanical devices.

### **Purchases and Stores Division (Headquarters, New York)**

Organized 1904 as Railway Storekeepers Association. Deals with problems involved in the purchase, inspection, storage and distribution for use of the 70,000 different items of materials and supplies and fuel which railroads buy in 12,174 communities, located in every state and 2,637 of the 3,072 counties in the United States. Its work includes cooperation in the development of standards and specifications of materials; methods of inventory control and storage; economical distribution from storage to the



widely scattered points of use on a railroad; methods of handling, preparation and sale of scrap materials; and reclamation practices.

The division, in cooperation with the Mechanical and Engineering Divisions, has done much toward the simplification and standardization of the stocks of supplies carried by railroads. In recent years, 44 general groups of commodities have been covered by simplified lists. As a result of such simplification, to take but a few examples, the number of different sorts of carriage and machine bolts has been reduced to less than one-third the number required in 1926; boiler and structural rivets to less than one-fourth; copper ferrules and tubing from 643 kinds and sizes to 74; and rolled steel wheels for engine trucks, from 142 items to 10. In the field of steel sheets for boilers, fire-boxes and tanks, the number of items carried in stock by a railroad has been reduced from 531 to 102. Studies looking toward further simplification of supply stocks are being carried on.

### Freight Claim Division (Headquarters Chicago)

Organized 1892 as the Freight Claim Association. Deals with the prompt and lawful settlement of freight claims with claimants; the prompt and equitable apportionment among carriers of amounts paid in the settlement of freight claims; and the study of causes and prevention of loss and damage to freight. The Division publishes a code of Principles and Practices for the Investigation and Disposition of Freight Claims with claimants, a code of Freight Claim Rules to cover the interline apportionment among carriers of amounts paid to claimants, and recommended practices to be followed in loss and damage prevention activities. Much of its work is carried on in close cooperation with shippers and receivers of freight, not only in the investigation and disposition of freight claims but also in mutual efforts to minimize freight loss and damage.

In its work, the Division maintains traveling representatives with headquarters at Chicago, New York, Philadelphia, Albany (Georgia) and Fort Worth, covering the several territories. Outstanding in the Division's present preventive efforts is the Perfect Shipping and Careful Handling movement, initiated in recent years by the Shippers Advisory Boards and carried on by them in cooperation with the railroads and other shipper groups. As a result of all such efforts, and of the improvement in railroad equipment and services, the average amount paid out in freight claims has declined from \$2.35 per revenue loaded car in 1921 to 70 cents per car in 1938.

### Motor Transport Division

Organized 1928. Acts as a clearing house for information and experience in connection with the use by railroads of motor transportation in perfecting their services, freight and passenger.

### Car Service Division (Headquarters, Washington)

*District managers*, Boston, New York, Atlanta, Pittsburgh, Cleveland, Cincinnati, Chicago, Minneapolis, St. Louis, Dallas, Omaha, San Francisco, Seattle; *resident car service agents*, Indianapolis, New Orleans, Baltimore, Detroit, Kansas City (Mo.), Buffalo, Syracuse, Toledo, Youngstown, Portland, Philadelphia, Los Angeles, Denver, Savannah.

Organized in 1917 as the Commission on Car Service of the American Railway Association. Became the Car Service Division in 1920.

This division deals primarily with the flow of freight cars loaded and empty from railroad to railroad, including the distribution of cars between railroads. It polices the observance of the Car Service Rules, established by the railroads to secure a reasonably prompt return of cars to the owning line, under load where possible or empty when no load going in that direction is available. It assists in assembling and supervising the distribution of cars necessary to handle large freight movements, such as a major grain crop. It has charge also of the placing of embargoes to forestall congestion where such

action is necessary. In emergency situations such as floods and storms the Car Service Division supervises car supply and movement, sending fleets of cars where needed.

Under agreement signed by the railroads, the Car Service Division has wide powers to work with the Interstate Commerce Commission in all car service matters on and between all railroads, to supervise the application of Car Service and Per Diem Rules, to suspend or permit departure from the mandatory provisions of Car Service Rules and to transfer cars from one railroad or territory to another if necessary to meet traffic conditions, with due regard to car ownership and requirements.

It is also the function of the Car Service Division to anticipate car loading requirements, that they may assist in arranging supply; to maintain contact with shippers and their various organizations for the purpose of assisting in the solution of transportation problems, and enlisting the cooperation of shippers and receivers in the prompt loading and unloading of railroad equipment, in loading cars as heavily as practicable, and so forth.

To better maintain this contact, the Car Service Division in 1922 and 1923 (at a time of critical and costly car shortages following emergence of the roads from government control) promoted the formation of, and cooperates closely with, the Regional Shippers Advisory Boards, thirteen of which now cover the entire country.

The Regional Shippers Advisory Boards are voluntary organizations. There are no membership fees, dues, or salaries. Generally, the Boards meet quarterly. At these meetings forecasts of car requirements for the ensuing quarter are set up, and efforts are made to adjust, through "across-the-table" discussion, transportation problems which might otherwise be settled only through the courts or regulatory action. While railroad representatives are encouraged to attend meetings and participate in discussions, they are not accorded membership or voting power in the Boards. Members contribute to the Board movement their time and such expense as is involved in attending meetings and preparing reports and forecasts.

It is significant that since the organization of these Boards there have been no general car shortages, and it is felt that despite the great improvement in railroad capacity and service since 1923, a good measure of the credit for this accomplishment accrues to the work of the Advisory Boards.

Forecasts of car requirements in each Board territory are combined and issued by the Car Service Division as a quarterly forecast of national freight car loadings; this forecast has become of very considerable importance as a business barometer. The division also issues weekly statements of cars actually loaded, which have come to be looked upon as an important index of business activity.

The work of the Advisory Boards during recent years has continued and broadened. On February 16, 1937, the thirteen Regional Shippers Advisory Boards joined in the formation of the National Association of Shippers Advisory Boards to correlate on a national scale the same sort of work which has proved so valuable in the separate regions.

## Freight Container Bureau

(Headquarters, New York)

Service Offices, Jacksonville, Harlingen (Tex.), San Francisco, Seattle

This bureau was organized by the railroads in 1921, to cooperate with shippers and receivers of freight in dealing with packing and container problems. In the year 1938, for example, its staff of engineers worked with shippers of products as diverse as mirrors and watermelons. They helped devise improved packing for such articles as gas and electric ranges, plate glass, neon signs, furniture, plumbing fixtures, citrus fruit, fresh vegetables, potatoes, and a great variety of other shipments. Shipping containers are tested by devices developed by the bureau. The bureau's findings, and the methods recommended, are published for the benefit of all, and are widely used.

The bureau has authority for all of the railroads over specifications for containers and loading rules for fresh fruits and vegetables. It issues dockets and holds public hearings, and prepares and distributes, through a publishing agent, tariffs giving container specifications, loading rules and other general rules pertaining to the transportation of fresh fruits and vegetables.

## **Bureau for the Safe Transportation of Explosives and Other Dangerous Articles**

(Headquarters, New York)

Inspectors at Boston, New York, Philadelphia, Washington, Birmingham, Dallas, San Francisco, Vancouver, Toronto, Denver, Kansas City, Chicago, Detroit, Pittsburgh.

This bureau, organized in 1906 under the auspices of the American Railway Association, works for the railroads, express companies, certain steamship companies, and with shippers and public authorities for the purpose of securing safe transportation of explosives and other dangerous articles. It makes inspections at railroad, express and steamship agencies, plants where explosives or other dangerous articles are manufactured and from which they are shipped, magazines in which explosives are stored, and shipping plants from which all classes of dangerous articles are forwarded; detailed investigations of accidents occurring in transportation or during storage on carriers' property, involving explosives or other dangerous articles; and corrections of violations of the regulations at shipping points and shippers' plants. It develops appropriate rules for safety and carries on a continuous campaign of education and instruction in safe practices in the handling of explosives and other dangerous articles.

The bureau maintains a chemical laboratory at South Amboy, New Jersey, at which samples of explosives and other dangerous articles are examined for the purpose of determining whether or not they are safe for transportation. It also develops, in cooperation with shippers, proper shipping containers. The success of its work and the degree of cooperation on the part of all concerned is indicated by the 1938 safety record of the railroads of the United States and Canada in handling approximately one-half billion pounds of so-called dangerous explosives—including, among other things, dynamite and other high explosives, black and smokeless powder, explosive ammunition and blasting caps—without accident, death or injury.

## **Committee on Automatic Train Control and Signals**

(Headquarters, Washington)

This committee was organized in 1921 to cooperate with the Bureau of Safety of the Interstate Commerce Commission in tests and investigations of automatic train control devices. It has published a series of bulletins on this subject as a text for maintenance employees and others interested, and distributes from time to time special information relating thereto. Since the enactment of the Signal Inspection Act, the Committee on Automatic Train Control and Signals is the unit of the Association dealing with the Interstate Commerce Commission on matters brought about by this act.

## **Joint Committee on Grade Crossing Protection**

(Headquarters, Washington)

This committee was organized in 1930 for the purpose of cooperating with governmental and other public authorities, in an endeavor to bring about uniformity of practices with respect to railroad-highway grade crossing protection. It has published recommended practices, revised to keep abreast of developments for this type of protection, which are endorsed by various national organizations concerned with the subject. It continues investigation of devices intended to afford additional protection, and cooperation with regulatory bodies.

## **Law Department**

(Headquarters, Washington)

This department deals with questions of law and legislation of common concern to the railroad industry. It advises with the officers of the Association and of the

individual railroads on legal questions which are of common interest. It represents the railroad industry as a whole in litigation and other legal matters, in proceedings before the Interstate Commerce Commission and other governmental bodies, and at hearings before committees of Congress. It compiles and distributes to the individual railroads current information concerning the application and effect of changes in regulations and legislation.

**PATENT DIVISION**, Washington and Chicago. This division deals with matters of patent law in which railroads are interested, including making necessary arrangements for the common use by all railroads of desirable patented devices.

### **Traffic Department** (Headquarters, Washington)

This department deals with questions as to rates, routing, tariff publication and simplification, classifications, and other traffic questions affecting the railroads in general, working with the traffic departments of individual railroads and with the general cooperation of an Advisory Committee of traffic officers. The questions which the department handles are presented by shippers and shippers' organizations, and by railroads and the territorial traffic organizations of railroads. In dealing with them, the department is in close and active touch with the Interstate Commerce Commission and other departments of the government which are concerned with such questions.

Through a permanent Tariff Simplification Committee, and with the cordial cooperation of shippers, railroads and the Interstate Commerce Commission, the department is working toward simpler tariffs of rail rates and charges, which will be more convenient to use and less expensive to compile and publish.

Classification of freight for rate purposes, and the whole system of freight rates, are undergoing comprehensive study by the department, acting through a special committee of nine leading traffic officials. Out of this study it is expected that there will result a simpler and more satisfactory system of railroad rates and charges.

Similar activities of the department, in cooperation with the United States Department of Commerce, led to the adoption of a uniform and simplified form of shippers' manifests, used in connection with the import and export of freight.

### **Finance, Accounting, Taxation and Valuation Department**

This department deals with standardization and simplification of railroad accounting, treasury, taxation and valuation practices and requirements. It is organized in three divisions, as follows:

**ACCOUNTING DIVISION**, Headquarters Washington. Organized 1888 as the Association of American Railway Accounting Officers, to deal with all phases of railroad accounting. Through its mandatory rules and recommended practices, and through the adoption of standard forms, it has helped to develop uniformity in railroad accounting procedure, resulting in greater simplicity and economy. Among the important subjects with which the division deals are freight, passenger, disbursement and terminal companies' accounts, statistics, and rules for overcharge and agency relief claims.

Mandatory rules established by the division govern the handling of interline accounts among railroads, while disputed points of interpretation and application of these rules are handled by the division's arbitration and appeal committees, whose decisions are binding.

Results of the division's research in accounting procedure and methods are embodied in recommended practices for further simplification and uniformity of accounts.

The division cooperates closely with the Interstate Commerce Commission in developing and keeping up to date the classifications and systems of carriers' accounts, and also in its statistical requirements.

**TREASURY DIVISION**, Headquarters Washington. Organized 1907 as the Society of Railway Financial Officers, to deal with such matters as methods of paying employees, uniform forms of vouchers and drafts, uniform credit rules, and improved methods of

settling accounts with patrons. It deals with methods of collecting transportation charges, handling order-and-advise shipments, collection of shippers' invoices, collection of undercharge freight bills, relations with banks, and the handling of railroad fiscal matters.

The division is organized in seven territorial groups, each one dealing with matters of common concern in its own section of the country.

**VALUATION DIVISION**, Headquarters Washington. Organized 1913 as the President's Conference Committee on Federal Valuation of Railroads in the United States, immediately following the passage by Congress of the Valuation Act of 1913, providing that the Interstate Commerce Commission make a valuation of all railroad property.

The committee's function was to provide a means of cooperation between the railroads and the Bureau of Valuation of the Interstate Commerce Commission in the immense task of taking an inventory of all railroad property. It formulated plans, forms and methods of work, and, on occasion, presented to the Commission the views of the railroads on questions of principles and methods. Regional offices were maintained to assist in the work of making the valuation.

Present activities include cooperative work with railroad committees and the Bureau of Valuation in keeping the inventory and valuation current.

### **Bureau of Railway Economics** (Headquarters, Washington)

Organized 1910 as a joint bureau for the scientific study of the economics of transportation. It is a fact-finding agency and the statistical and economic clearing house for the railways. It has specialized divisions for research, compilation and tabulation of statistics, and other branches of economic study. Its surveys and publications in the broad field of transportation economics are accepted as authoritative and are widely used, not only by the railroads but also by those not connected with the industry, such as university teachers and students, businessmen and organizations, and government officials.

The bureau's periodic reports of railroad earnings and other statistical information are widely published as items of current business and financial news.

**LIBRARY, BUREAU OF RAILWAY ECONOMICS**, Washington. Founded in 1910 as a division of the bureau. This is now the largest transportation library in the United States, including about 200,000 items dealing with railroads and related subjects.

The library is open for the use of the public. Its reference division answers a wide variety of questions, from many sources, for all kinds of information about transportation. In this work the staff has the use of one of the most complete files in existence of railroad reports, periodicals and proceedings of railroad organizations. The library prepares and distributes library lists of references.

### **Competitive Transportation Research**

(Office of the President, Washington; regional offices, Chicago and New York)

Organized 1934. The purpose of this division is to collect and analyze pertinent, current data on problems arising in connection with competitive conditions between railroads, highways, waterways and airways. The division is under the direction of the Economist of the Association, as chief director, with directors in the western and eastern districts.

The division has assisted in developing a statement of principles of fair competition between railroads and waterways and has given much study to government subsidy to competitive forms of transportation. With the assistance of Mr. Clifford Older, Professor C. B. Breed and Professor W. S. Downs, it has prepared and issued a study of highway costs. The directors of the eastern and western divisions issue bulletins covering pertinent, timely and interesting information with respect to the competitive relationship between transportation agencies, with particular reference to their regions. Research studies have been carried on both East and West.

## Public Relations

### Office of the President—Washington

The railroads recognize that they must not only continue to improve their methods and their services to shippers and travelers, but also to present to the general public the facts about themselves—what railroads are, what they do, and what they mean to the American people.

Acting for the industry as a whole, the Association cooperates with the separate railroads in presenting these essential facts, to the end that there may be better understanding between railroads and the public, and a better appreciation of railroad progress, achievements and problems. This work is carried on through the office of the president of the Association.

In connection with this work, the Association makes available in convenient form, and distributes to those interested, a great variety of information about the American railroads. In addition, this office cooperates with those seeking special information about particular transportation questions.

### Publications

In addition to numerous economic studies published by the Bureau of Railway Economics, the technical publications of the Association and its various departments number more than 600 titles, ranging from brief pamphlets to extensive technical works of encyclopedic proportions.

The majority of these publications are available to the public, some for free distribution and others for sale. A price list of publications issued by the Association is published by the Secretary-Treasurer, Association of American Railroads, Transportation Building, Washington, D. C.

## APPENDIX III

### INSTRUCTIONS GOVERNING THE PLACING AND HANDLING OF EMBARGOES

1. An embargo is a method of controlling traffic movements when accumulations, threatened congestions or other interferences with operation, of a temporary nature, compel restrictions against such movements. Embargoes shall be placed against consignees who fail to unload or otherwise dispose of freight promptly on arrival.

2. A railroad shall promptly place its own embargo restrictions rather than wait for such action by its connections, when such connections are offering traffic in excess of ability of such receiving road to currently accept. "Hold" orders shall not be placed against connections (except in cases of sudden physical disability) to control general movements of traffic for a period longer than twenty-four hours, and shall not be extended. When necessary to restrict the movement of traffic for periods in excess of twenty-four hours, this shall be accomplished by means of an embargo.

3. An embargo shall not be used as a permanent measure to control traffic movements when possible to regulate by tariff. It shall not be permissible to maintain an embargo against:

(a) Freight for railroads or parts thereof, or stations, which are to be permanently abandoned, except as a temporary measure, to be kept in effect only until tariff revision can be accomplished. The Interstate Commerce Commission has ruled that rates to stations shown as abandoned in Leland's Official List of Open and Prepay Stations are without force or effect, in tariffs subject thereto, on and after the date of abandonment as published in "Leland's List" or its supplements. Unless there are applicable tariffs in effect, not subject to "Leland's List," embargoes placed because of abandonment shall be cancelled as soon as corrections become effective in "Leland's List."

(b) Quarantined freight, except as a temporary measure, until published in the quarantine tariff. (B. T. Jones, Agent.)

(c) Restrictions account regularly recurring weather conditions, for example suspension of navigation during winter months, except to cover a period not practicable to include in tariffs.

4. Embargoes are prohibited:

(a) At request of consignees.

(b) To control the routing of traffic to or via any particular gateway or road.

(c) Against acceptance of cars loaded in excess of a specified weight or clearance as published in Railway Line Clearances.

(d) Against acceptance of freight on specified days.

(e) Against acceptance of more than a specified number of cars daily or periodically.

(f) Against freight consigned to the United States Government, its authorized agents or officers. Since it is illegal to embargo such traffic, it shall be unnecessary to mention Government freight as an exemption in individual embargoes.

(g) Against less earload freight when specifying minimum tonnage per car. Shipments subject to minimum earload rates under the governing classification must not be accepted at less earload rates and forwarded in the face of embargoes against earload traffic.

(h) Against empty cars returning home in accordance with Car Service Rules.

(i) Against empty cars moving on specific orders of the Car Service Division.

(j) Against less earload freight for handling at specified transfer stations, unless the territory affected is definitely described, either by naming specific destination stations affected, or by naming the initial and terminal stations when intermediate points are included. The embargoing road shall be required to furnish loading instructions under which freight not subject to such embargoes may be forwarded.

NOTE—Explosives and other dangerous articles accepted contrary to existing embargoes must be handled in accordance with Interstate Commerce Commission regulations, irrespective of the embargo restriction.

5. When other than an absolute embargo is placed, there shall be uniformity in exemptions. These exemptions shall include, so far as practicable, the items listed below and in the order named:

#### Code Word

**EMBANK:** Livestock, live poultry, perishable.

**NOTE—**In determining commodities which shall be considered as perishable freight, Perishable Protective Tariff of the National Perishable Freight Committee, (J. J. Quinn, Agent), shall govern.

**EMBASSY:** Coal, Coke and Charcoal. Petroleum and its products.

**EMBED:** Food, domestic (not export), for human consumption (see page 58) including wheat, corn, oats, rye, barley, rice, cereal products, salt, canned goods, sugar, and lard substitutes. Feed, domestic (not export), for animals and poultry, not including hay and straw.

**EMBLEM:** Printing paper and printing ink.

**EMBODY:** Railroad material and supplies (other than coal or coke) consigned to an officer of the purchasing road at a point on such road.

Materials and supplies consigned to locomotive and car manufacturers for the construction and repair of locomotives and freight and passenger cars.

**EMBOLD:** Fluxing stone and materials for blast furnaces.

Supplies for coal mines, oil refineries and oil and gas wells.

**EMBOSS:** Field and garden seeds, seed grain, nursery stock.

Spraying materials, insecticides and implements for use thereof.

Agricultural implements and farm machinery required for preparing the soil.

Canning machinery.

Fertilizer or fertilizer materials, including agricultural lime, pulverized limestone and phosphate rocks.

**EMBRACE:** Acids, alcohol, ammonia, ammoniacal liquor.

Empty tank cars, empty metal, glass or jacketed oil, acid, gas or ammonia containers, ink drums; food and medicine containers.

Liquid chlorine, alum, sulphate of iron, and similar chemicals when to be used for purification of water supply and when consigned to municipal authorities.

Medicines, drugs, surgical instruments and surgical dressings, hospital and sick room supplies.

Tin plate for the manufacture of food containers.

Heating apparatus.

6. Permits: Congestions, or interference with normal movement of traffic at terminals, or in areas where difficulty is found in the prompt release of freight car equipment by reason of an abnormal flow of traffic, it is believed may best be relieved by an embargo, which shall be promptly issued and continued in effect so long as necessary to reduce the volume awaiting delivery to a normal amount. Such embargoes shall exempt only those actual commodities which are necessary to meet the public need at the point involved. Where a permit system is used, it shall be established in such a way as to protect the shipping public against undue discrimination and should be confined:

(a) To the acceptance of grain and other freight for export or water movement when to meet definite steamer commitment.

(b) To the control when and where necessary of the flow of perishable traffic to markets subject to congestion, and

(c) To such other emergency situations as may arise when there is no question as to the public necessity for special transportation relief. Copies of permits issued under this rule shall be sent promptly and currently to the Chairman of the Car Service Division, Washington, D. C., with information to show reasons for the issuance of such permits.

7. Embargoes and extensions of embargoes will become effective forty-eight (48) hours after 11:59 p. m. of date of issue, in accordance with Per Diem Rule 16, which reads in part as follows:

“When a road gives notice that for any reason it cannot accept cars in any specified traffic, thereby laying an embargo, it should receive cars already loaded with such traffic



on the date such notice is issued, and cars loaded within forty-eight (48) hours thereafter. If it does not receive such cars the road holding them may reclaim per diem under Rule 15 from the road laying the embargo for the number of days such cars are held, not exceeding the duration of the embargo.

“Forty-eight (48) hours after 11:59 p. m. of the date of the embargo a road must not load, or permit to be loaded cars in such traffic; nor accept orders to divert or reassign cars already loaded.”

8. The date of loading, diversion or reassignment shall be determined from the data accompanying the car.

9. When request to reassign or divert a shipment enroute is filed with an authorized representative of a carrier involved and request is complied with, the following notation must be made on waybill:

“Diversion accepted....., by.....  
(date) (Authorized representative and road receiving request.)”

If request be received too late to be acted upon by the road receiving it and that road transmits the request to another road involved, such transmittal request must specify the date of acceptance (i.e. receipt) of request by the road addressed by the consignee, or consignor, and that date of acceptance and the name of the authorized representative and of the road accepting it must, likewise, be endorsed on waybill by the road which effects reassignment or diversion.

10. (a) Modifications and cancellations of embargoes become effective immediately on receipt of notice, unless otherwise specified therein.

(b) Not more than (2) two supplements to any embargo shall be permissible. When additional supplements are considered necessary entire embargo shall be revised or reissued under another number.

(c) When an embargo is revised or reissued, the portions of the original restrictions remaining in effect shall be considered continuous in application.

11. For the purpose of uniformity, and to expedite the interchange of embargoes, the railroads of the United States, Canada and Mexico have been divided into zones. The Car Service Division will assign the zone embargo chairmen and will assign primary roads in each zone. (See page 51.) It will also assign other than primary roads, termed secondary roads, to primary roads for embargo purposes. (See page 53.)

12. (a) Each railroad shall designate an officer who shall issue and receive embargoes. His name, title and address must be published in the Railway Equipment Register.

(b) Each railroad shall maintain such supervisory organization as may be necessary to insure a uniform understanding and observance, by all agents and other employees concerned, of Embargo Rules, Regulations and Instructions.

(c) Each railroad shall maintain a file of applicable embargoes at stations for the information of the public.

13. (a) Each railroad will number embargoes it originates, consecutively, beginning with number one on January 1 of each year. Such number only shall be transmitted, and the originating roads' file numbers or prefixes omitted. In reissuing embargoes of secondary roads assigned to them, primary roads shall utilize separate series of embargo numbers for each such secondary road and place such embargoes in the name of the secondary road. Following is example of recommended form for use in placing embargoes or supplements thereto:

Embargoed Road, Number and Date of Issue	Commodity	Destination or Territory	Consignee	Exemption	Cause
East and West Railway Embargo No. 5 Oct. 15, 1938	Carload Freight	Chicago, Illinois	North & South Mfg. Company	None	Accumulation

14. (a) A primary road placing, modifying, extending or cancelling an embargo of its own issue or of secondary roads assigned to it, shall transmit by wire, or mail, as the necessity indicates, a copy of such notice to:

- (1) The chairman of the zone to which it is assigned.
- (2) The designated embargo officer of direct rail and water connections involved in the embargo.
- (3) Local agents and other representatives of its own line.

(b) A secondary road placing, modifying, extending or cancelling embargoes shall transmit by wire or mail as the necessity indicates, a copy of such notice to:

- (1) The primary road to which it is assigned.
- (2) The designated embargo officer of other direct rail and water connections involved in the embargo.
- (3) Local agents and other representatives of its own line.

(c) A primary road receiving embargoes, modifications, extensions or cancellations thereof, in addition to notifying its own representatives, shall notify the secondary roads assigned to it. Secondary roads receiving such notices shall notify their own representatives as may be necessary.

15. The zone chairman shall immediately transmit all embargo notices received by him, by wire or mail as the necessity indicates, to primary roads, and water carriers assigned to his zone, and to other zone chairmen.

16. When embargoed shipments are known to originate locally, or on a direct connection only, the text of the embargo should so indicate, and the advices to the zone chairman may be sent by mail. General distribution of such embargoes will not be made.

17. The phrase: "Cars in transit will not be accepted," may only be used in cases of washouts, floods, accidents or other interruptions of service of an emergency nature, when it is physically impossible for the embargoing road to receive any traffic. When so used it shall not relieve the issuing carrier of any responsibility under Per Diem Rules.

18. Arrangements have been made with water carriers listed on page 57 to transmit embargoes, modifications, extensions or cancellations thereof, issued by them to the chairman of the zone to which they are assigned, and to connecting rail carriers. In turn, the zone chairman shall transmit embargo notices of rail and other water carrier issue to the water carriers assigned to his zone. Water carrier embargo notices transmitted to the zone chairman shall be issued in the name of the originating water carrier. In the event of failure of a water carrier to receive freight currently, and to issue formal embargo notice, it shall be incumbent on connecting rail carriers to issue individual embargoes covering the traffic involved, in the same manner as against individual receivers.

19. Railroads shall cooperate in placing territorial embargoes to prevent diversion of traffic through routes which would add to congestion.

20. When shipments are held enroute as a result of embargoes, shippers and consignees shall so far as practicable be promptly notified.

21. When an embargo is necessary against a consignee served in switching service, the embargo shall be placed by the road on whose tracks the plant is located. If served by more than one road, embargo shall be placed by each such road.

The Car Service Division will issue a monthly summary of effective embargoes as reflected in its embargo files. It is requested this summary be checked promptly upon receipt and the Car Service Division advised of any discrepancies.

**PRIMARY RAILROADS INTERCHANGING EMBARGO INFORMATION DIRECT WITH  
EMBARGO ZONE CHAIRMAN**

**WASHINGTON EMBARGO ZONE**

**ZONE HEADQUARTERS:**

TRANSPORTATION BUILDING,  
17TH & H STREETS, NORTHWEST,  
WASHINGTON, D. C.

**ADDRESS:**

W. C. KENDALL, CHAIRMAN  
CAR SERVICE DIVISION  
ASSOCIATION OF AMERICAN RR'S.

**NAME OF ROAD**

Akron, Canton & Youngstown  
Atlanta & West Point  
Atlanta Birmingham & Coast  
Atlantic Coast Line  
Baltimore & Ohio  
Bangor & Aroostook  
Bessemer & Lake Erie  
Boston & Albany  
Boston & Maine  
Central of Georgia  
Central Railroad of New Jersey  
Central Vermont  
Charleston & Western Carolina  
Chesapeake & Ohio  
Clinchfield  
Columbus & Greenville  
Cumberland & Pennsylvania  
Delaware & Hudson  
Delaware, Lackawanna & Western  
Erie  
Florida East Coast  
Georgia  
Georgia & Florida  
Gulf, Mobile & Northern  
Lehigh & Hudson River  
Lehigh & New England  
Lehigh Valley  
Long Island  
Maine Central  
Mississippi Central  
Monongahela  
Montour  
Nashville, Chattanooga & St. Louis  
New York Central  
New York, Chicago & St. Louis  
New York, New Haven & Hartford  
New York Ontario & Western  
Norfolk & Western  
Norfolk Southern  
Pennsylvania  
Pennsylvania-Reading Seashore Lines  
Pittsburgh Lake Erie  
Pittsburgh & Shawmut  
Pittsburgh & West Virginia  
Pittsburgh, Shawmut & Northern  
Reading  
Richmond, Fredericksburg & Potomac  
Rutland  
Seaboard Air Line  
Southern  
Tennessee Central  
Union Railroad  
Virginian  
Western Maryland  
Western Ry. of Alabama  
Wheeling & Lake Erie

**EMBARGO HEADQUARTERS**

Akron, Ohio  
(See Georgia)  
Atlanta, Ga.  
Wilmington, N. C.  
Baltimore, Md.  
Bangor, Me.  
Pittsburgh, Pa.  
Springfield, Mass.  
Boston, Mass.  
Savannah, Ga.  
(See Reading)  
St. Albans, Vt.  
(See Atlantic Coast Line)  
Richmond, Va.  
Erwin, Tenn.  
Columbus, Miss.  
Cumberland, Md.  
Albany, N. Y.  
Scranton, Pa.  
Cleveland, Ohio  
St. Augustine, Fla.  
Atlanta, Ga.  
Augusta, Ga.  
Mobile, Ala.  
Warwick, N. Y.  
Bethlehem, Pa.  
Bethlehem, Pa.  
Jamaica, N. Y.  
(See Boston & Maine)  
Hattiesburg, Miss.  
Brownsville, Pa.  
Corapolis, Pa.  
Nashville, Tenn.  
Buffalo, N. Y.  
Cleveland, Ohio  
New Haven, Conn.  
Middletown, N. Y.  
Roanoke, Va.  
Norfolk, Va.  
Philadelphia, Pa.  
Camden, N. J.  
Pittsburgh, Pa.  
Kittanning, Pa.  
Pittsburgh, Pa.  
St. Mary's, Pa.  
Philadelphia, Pa.  
Richmond, Va.  
Rutland, Vt.  
Norfolk, Va.  
Washington, D. C.  
Nashville, Tenn.  
East Pittsburgh, Pa.  
Norfolk, Va.  
Hagerstown, Md.  
(See Georgia)  
Brewster, Ohio

**CHICAGO EMBARGO ZONE**

**ZONE HEADQUARTERS:**

59 EAST VAN BUREN ST.,  
CHICAGO, ILL.

**ADDRESS:**

W. D. BECK,  
ZONE EMBARGO CHAIRMAN

Alton  
Ann Arbor  
Atchison, Topeka & Santa Fe  
Baltimore & Ohio Chicago Terminal  
Belt Railway of Chicago  
Burlington-Rock Island  
Chicago & Eastern Illinois  
Chicago & Illinois Midland  
Chicago & Northwestern  
Chicago & Western Indiana  
Chicago, Burlington & Quincy  
Chicago Great Western  
Chicago, Indianapolis & Louisville  
Chicago Junction  
Chicago, Milwaukee St. Paul & Pacific  
Chicago, North Shore & Milwaukee  
Chicago River & Indiana  
Chicago, Rock Island & Pacific  
Chicago, St. Paul, Minneapolis & Omaha  
Chicago South Shore & South Bend

Chicago, Ill.  
Toledo, Ohio  
Chicago, Ill.  
(See Alton)  
Chicago, Ill.  
(See Fort Worth & Denver City)  
Chicago, Ill.  
Springfield, Ill.  
Chicago, Ill.  
Chicago, Ill.  
Chicago, Ill.  
Chicago, Ill.  
Chicago, Ill.  
Lafayette, Ind.  
(See Chicago River & Indiana)  
Chicago, Ill.  
Highwood, Ill.  
Chicago, Ill.  
Chicago, Ill.  
St. Paul, Minn.  
Michigan City, Ind.

**PRIMARY RAILROADS INTERCHANGING EMBARGO INFORMATION DIRECT WITH  
EMBARGO ZONE CHAIRMAN**

**CHICAGO EMBARGO ZONE (Continued)**

<b>NAME OF ROAD</b>	<b>EMBARGO HEADQUARTERS</b>
Chicago West Pullman & Southern	Chicago, Ill.
Cleveland, Cincinnati, Chicago & St. Louis	Indianapolis, Ind.
Colorado & Southern	Denver, Colo.
Denver & Rio Grande Western	Denver, Colo.
Denver & Salt Lake	Denver, Colo.
Des Moines Union	Des Moines, Iowa
Detroit & Mackinac	Tawas City, Mich.
Detroit & Toledo Shore Line	Detroit, Mich.
Detroit, Toledo & Ironton	Dearborn, Mich.
Duluth Missabe & Iron Range	Duluth, Minn.
Duluth South Shore & Atlantic	Marquette, Mich.
Elgin Joliet & Eastern	Joliet, Ill.
Ferrocarril Kansas City Mexico y Oriente	Cd. Juarez, Chih., Mex.
Ferrocarriles Nacionales de Mexico	Mexico D. F., Mex.
Fort Worth & Denver City	Fort Worth, Tex.
Grand Trunk Western	Detroit, Mich.
Great Northern	St. Paul, Minn.
Green Bay & Western	Green Bay, Wis.
Gulf Coast Lines	Houston, Tex.
Gulf, Colorado & Santa Fe	Galveston, Tex.
Illinois Central	Chicago, Ill.
Illinois Northern	(See Chicago West Pullman & Southern)
Illinois Terminal	St. Louis, Mo.
Indiana Harbor Belt	(See Chicago River & Indiana)
International-Great Northern	(See Gulf Coast Lines)
Kansas City, Mexico & Orient	(See Ferrocarril Kansas City Mexico y Oriente)
Kansas City Southern	Kansas City, Mo.
Kansas, Oklahoma & Gulf	(See Midland Valley)
Lake Superior & Ishpeming	Marquette, Mich.
Louisiana & Arkansas	Shreveport, La.
Louisiana, Arkansas & Texas	Shreveport, La.
Louisville & Nashville	Louisville, Ky.
Manistique & Lake Superior	(See Ann Arbor)
Michigan Central	Detroit, Mich.
Midland Valley	Muskogee, Okla.
Minneapolis & St. Louis	Minneapolis, Minn.
Minneapolis, St. Paul & Sault Ste. Marie	Minneapolis, Minn.
Missouri & Arkansas	Harrison, Ark.
Missouri-Illinois	(See Missouri Pacific)
Missouri-Kansas-Texas	Denison, Tex.
Missouri Pacific	St. Louis, Mo.
Mobile & Ohio	St. Louis, Mo.
National Railways of Mexico	(See Ferrocarriles Nacionales de Mexico)
Nevada Northern	East Ely, Nev.
Northern Pacific	St. Paul, Minn.
Northwestern Pacific	San Francisco, Cal.
Oklahoma City-Ada-Atoka	(See Midland Valley)
Pacific Electric	Los Angeles, Cal.
Peoria & Pekin Union	Peoria, Ill.
Pere Marquette	Detroit, Mich.
St. Louis-San Francisco	Springfield, Mo.
St. Louis Southwestern	Tyler, Tex.
Southern Pacific (Pacific Lines)	San Francisco, Cal.
Southern Pacific (Texas & Louisiana Lines)	Houston, Tex.
Spokane International	Spokane, Wash.
Spokane Portland & Seattle	Portland, Ore.
Terminal Railroad Assn. of St. Louis	St. Louis, Mo.
Texas & Pacific	Dallas, Tex.
Toledo Peoria & Western	Peoria, Ill.
Union Pacific	Omaha, Neb.
Utah	Salt Lake City, Utah
Wabash	St. Louis, Mo.
Western Pacific	San Francisco, Cal.
Wichita Valley	(See Fort Worth & Denver City)

**MONTREAL EMBARGO ZONE**

**ZONE HEADQUARTERS:**

487 ST. JAMES ST.,  
MONTREAL, QUEBEC

**ADDRESS:**

C. P. RIDDELL  
ZONE EMBARGO CHAIRMAN

Algoma Central & Hudson Bay  
Alma & Jonquieres  
Canada & Gulf Terminal  
Canadian National (Atlantic Region)  
Canadian National (Central Region)  
Canadian Pacific (Eastern Lines)  
Cumberland Railway & Coal  
Dominion Atlantic  
Essex Terminal  
Fredericton & Grand Lake Coal & Ry.  
Grand River  
Hull Electric  
Lake Erie & Northern  
London & Port Stanley  
Maritime Coal Ry. & Power  
Montreal & Southern Counties  
Montreal Tramways

Sault Ste. Marie (Ontario)  
Isle Maligne, Lake St. John, Quebec  
Mont Joli, Quebec  
Moncton, N. B.  
Toronto, Ontario  
Toronto, Ontario  
(See Sydney & Lousburg)  
Kentville, N. S.  
Walkerville, Ontario  
Fredericton, N. B.  
Galt, Ontario  
Hull, Quebec  
(See Grand River).  
London, Ontario  
Amherst, N. S.  
St. Lambert, Quebec  
Montreal, Quebec

**PRIMARY RAILROADS INTERCHANGING EMBARGO INFORMATION DIRECT WITH  
EMBARGO ZONE CHAIRMAN**

**MONTREAL EMBARGO ZONE (Continued)**

NAME OF ROADS	EMBARGO HEADQUARTERS
Napierville Junction	Montreal, Quebec
Newfoundland	St. Johns, Newfoundland
Niagara St. Catherines & Toronto	Toronto, Ontario
Oshawa	Toronto, Ontario
Quebec Central	Sherbrooke, Quebec
Quebec Ry. Light & Power	Quebec, Quebec
Roberval & Saguenay	Arvida, Quebec
Sydney & Louisburg	Sydney, N. S.
Temiscouata	Riviere du Loup, Quebec
Temiskaming & Northern Ontario	North Bay, Ontario
Thousand Islands	Gananoque, Ontario
Toronto, Hamilton & Buffalo	Hamilton, Ontario

**WINNIPEG EMBARGO ZONE**

ZONE HEADQUARTERS:	ADDRESS:
UNION STATION WINNIPEG, MANITOBA	JOS. B. PARKER ZONE EMBARGO CHAIRMAN

British Columbia Electric	New Westminister, B. C.
Canadian National (Western Region)	Winnipeg, Manitoba
Canadian Pacific (Western Lines)	Winnipeg, Manitoba
Duluth, Winnipeg & Pacific	(See Canadian National-Western Region)
Greater Winnipeg Water District	St. Boniface, Manitoba
Midland Ry. Co. of Manitoba	Winnipeg, Manitoba
Morrissey, Fernie & Michel	Fernie, B. C.
National Harbours Board (Terminal Ry.)	Vancouver, B. C.
Northern Alberta	Edmonton, Alberta
Pacific Great Eastern	Vancouver, B. C.

**SECONDARY RAILROADS (INDENTED) ARE ASSIGNED TO AND WILL INTERCHANGE EMBARGO  
INFORMATION DIRECT WITH PRIMARY ROADS UNDER WHICH LISTED**

**WASHINGTON ZONE**

Atlanta & West Point (See Georgia)	Bangor & Aroostook
Atlanta Birmingham & Coast	Aroostook Valley
Ashland	Bessemer & Lake Erie
Georgia Southwestern & Gulf	Unity
Atlantic Coast Line	Western Allegheny
Alabama & Florida	Boston & Albany
Apalachicola Northern	Grafton & Upton
Atlantic & Carolina	Boston & Maine
Atlantic & North Carolina	Barre & Chelsea
Atlantic & Western	Berlin Mills
Bamberg Ehrhardt & Walterboro	Cumberland County Power & Light
Beaufort & Morehead	Hoosac Tunnel & Wilmington
Cape Fear	Montpelier & Wells River
Carolina Southern	St. Johnsbury & Lake Champlain
Carolina Western	Springfield Terminal
Columbia Newberry & Laurens	Suncook Valley
East Carolina	York Utilities
Flint River & Northeastern	Central of Georgia
Georgia Ashburn Sylvester & Camilla	Atlanta & St. Andrews Bay
Georgia Northern	Bowden
Hampton & Branchville	Chattahoochee Valley
Lakeland	Louisville & Wadley
Laurinburg & Southern	Sandersville
Live Oak Perry & Gulf	Savannah & Atlanta
Port Utilities Commission	Sylvania
Rockingham	Talbotton
South Georgia	Tennessee Alabama & Georgia
Tidewater Power	Wadley Southern
Virginia & Carolina Southern	Wrightsville & Tennille
Wilmington Brunswick & Southern	Central Railroad of New Jersey
Baltimore & Ohio	Chestnut Ridge
Akron & Barberton Belt	East Jersey RR & Terminal
Baltimore & Annapolis	Mt. Hope Mineral
Benwood & Wheeling Connecting	New York & Long Branch
Buffalo Creek & Gauley	Northampton & Bath
Canton	Rahway Valley
Castleman River	Raritan River
Couderaport & Port Allegany	Southern New Jersey
East Washington	Wharton & Northern
Johnstown & Stoney Creek	Central Vermont
Lake Terminal	Phillipsburg Railway & Quarry
McKeesport Connecting	Charleston & Western Carolina
Middle Creek	(See Atlantic Coast Line)
Middle Fork	Chesapeake & Ohio
Monongahela West Penn Public Service	Kanawha Central
Potomac Edison	Kanawha Glen Jean & Eastern
Preston	Morehead & North Fork
River Terminal	Muncie & Western
Rowlesburg & Southern	Nelson & Albemarle
Staten Island Rapid Transit	Ohio Midland Light & Power
Strouds Creek & Muddlety	Winifrede
West Virginia Northern	Clinchfield
Winchester & Wardensville	Black Mountain

SECONDARY RAILROADS (INDENTED) ARE ASSIGNED TO AND WILL INTERCHANGE EMBARGO INFORMATION DIRECT WITH PRIMARY ROADS UNDER WHICH LISTED

WASHINGTON ZONE (Continued)

Delaware & Hudson	Pennsylvania
Albany Port District	Beaver Valley
Greenwich & Johnsonville	Bellefonte Central
Lake Champlain & Moriah	Boyer City
Schoharie Valley	Cheswick & Hamar
Southern New York	Clarion River
Delaware Lackawanna & Western	Conemaugh & Black Lick
Bush Terminal	Donora Southern
Harlem Transfer	East Broad Top RR & Coal
Lackawanna & Wyoming Valley	East Erie Commercial
West Pittston-Exeter	Etna & Montrose
Erie	Huntingdon & Broad Top Mountain
Arcade & Attica	Kishacoquillas Valley
Brooklyn Eastern District Terminal	Lake Erie Franklin & Clarion
Dansville & Mt. Morris	Ligonier Valley
Genesee & Wyoming	Maryland & Pennsylvania
Hoboken Manufacturers	New York Dock
International	Patapsco & Back Rivers
Jamestown Westfield & Northwestern	Pennsylvania & Atlantic (Union Transportation Co.)
Morristown & Erie	Philadelphia & Western
Prattsburgh	Pittsburgh Lisbon & Western
Youngstown & Northern	Sheffield & Tionesta
Florida East Coast	Steelton & Highspire
Port Everglades	Stewartstown
Trans-Florida Central	Straaburg
United Rys. of Havana	Susquehanna & New York
Western Ry. of Havana	Susquehanna River & Western
Georgia	Tionesta Valley
Birmingham & Southeastern	Union Transportation Co (Pennsylvania & Atlantic)
Greene County	Upper Merion & Plymouth
Millstead	Valley Railroad (Of Penna)
Tuskegee	Washington Brandywine & Pt. Lookout
Gulf Mobile & Northern	Winfield
Meridian & Bigbee River	Youngstown & Suburban
Mississippi Export	Pittsburgh & Lake Erie
Oklona Houston & Calhoun City	Alliquippa & Southern
Terminal Ry. (Alabama State Docks)	Allegheny & South Side
Lehigh Valley	Lake Erie & Eastern
Buffalo Creek	Monongahela Connecting
Ironton	Pittsburgh Allegheny & McKees Rocks
Philadelphia Bethlehem & New England	Pittsburgh & Ohio Valley
Long Island	Pittsburgh Chartiers & Youghiogheny
South Brooklyn	Reading
Maine Central	Cornwall
Bangor Hydro-Electric	Trenton-Princeton Traction
Belfast & Moosehead Lake	Richmond Fredericksburg & Potomac
Lime Rock	Virginia Central
Portland Terminal	Rutland
New York Central	Clarendon & Pittsford
Cambria & Indiana	Seaboard Air Line
Campbell's Creek	Aberdeen & Rockfish
Fairport Painesville & Eastern	Bennettsville & Cheraw
Fonda Johnstown & Gloversville	Charlotte Monroe & Columbia
Grasse River	Chesterfield & Lancaster
Jay St. Terminal	Cliffside
Kelley's Creek	Collins & Glenville
Kelley's Creek & Northwestern	Durham & Southern
Lakeside & Marblehead	Edgemoor & Manetta
Lewiston & Youngstown Frontier	Jacksonville Gainesville & Gulf
Lorain & Southern	Macon Dublin & Savannah
Lowville & Beaver River	Moore Central
Marcellus & Otisco Lake	Norfolk & Portsmouth Belt
Massena Terminal	Piedmont & Northern
Ningara Junction	Raleigh & Charleston
Norwood & St. Lawrence	St. Mary's
Ohio Public Service	Tavares & Gulf
Skaneateles	Warrenton
South Buffalo	Southern
Twin Branch	Alabama Central RR
New York Chicago & St. Louis	Alabama Tennessee & Northern
Euclid	Atlantic & Yadkin
Indiana Railroad System	Augusta Northern
Newburgh & South Shore	Bonhomie & Hattiesburg Southern
New York New Haven & Hartford	Buffalo Union-Carolina
Fore River	Carolina & Northwestern
Moshaussuck Valley	Due West
Narragansett Pier	East Tennessee & Western North Carolina
Union Freight	Ferdinand
Wood River Branch	Gainesville Midland
New York Ontario & Western	Graham County
Delaware & Northern	Greenville & Northern
Middletown & Unionville	Hartwell
Unadilla Valley	High Point Thomasville & Denton
Norfolk & Western	Kentucky & Tennessee
Chesapeake Western	Lancaster & Chester
Interstate	Little River
Winston-Salem Southbound	

SECONDARY RAILROADS (INDENTED) ARE ASSIGNED TO AND WILL INTERCHANGE EMBARGO INFORMATION DIRECT WITH PRIMARY ROADS UNDER WHICH LISTED

WASHINGTON ZONE (Continued)

Southern—(Cont'd)  
 Louisville New Albany & Corydon  
 Mobile & Gulf  
 Municipal Docks & Terminals  
 Oneida & Western  
 Pearl River Valley  
 Pickens  
 Smoky Mountain  
 Sumter & Choctaw  
 Tennessee  
 Tennessee & North Carolina  
 Tuckasegee & Southeastern  
 Virginia Blue Ridge  
 Ware Shoals  
 Warrior River Terminal  
 Washington & Old Dominion  
 Tennessee Central  
 Nashville-Franklin  
 Western Maryland  
 East Berlin  
 Emmitsburg  
 Western Ry of Alabama  
 (See Georgia)  
 Wheeling & Lake Erie  
 Bay Terminal  
 Cuyahoga Valley

CHICAGO ZONE

Alton  
 Chicago Springfield & St. Louis  
 Ann Arbor  
 Toledo Angola & Western  
 Toledo Terminal  
 Atchison Topeka & Santa Fe  
 Apache  
 Arkansas Valley Interurban  
 Chicago Produce Terminal  
 Garden City Western  
 Joplin-Pittsburg  
 St. Joseph Terminal  
 Santa Fe Northwestern  
 Santa Fe San Juan & Northern  
 Union Electric  
 Verdie Tunnel & Smelter  
 Wichita Northwestern  
 Yosemite Valley  
 Chicago & Eastern Illinois  
 Chicago Attica & Southern  
 Chicago Heights Terminal Transfer  
 Jefferson Southwestern  
 Chicago & Northwestern  
 Escanaba & Lake Superior  
 Hillsboro & Northeastern  
 Laona & Northern  
 LaSalle & Bureau County  
 Omaha Lincoln & Beatrice  
 Rapid City Black Hills & Western  
 Robbins  
 Chicago Burlington & Quincy  
 Bevier & Southern  
 Chicago Aurora & Elgin  
 Chicago Short Line  
 Davenport Rock Island & Northwestern  
 Galesburg & Great Eastern  
 Hannibal Connecting  
 Hoopole Yorktown & Tampico  
 Illinois Midland  
 Iowa Southern Utilities  
 Lee County Central Electric  
 Manufacturers Jct.  
 Missouri & Illinois Bridge & Belt  
 Paducah & Illinois  
 Rock Port Langdon & Northern  
 St. Louis & Troy  
 Union Terminal  
 Wyoming  
 Chicago Great Western  
 Manchester & Oneida  
 Chicago Junction  
 (See Chicago River & Indiana)  
 Chicago Milwaukee St. Paul & Pacific  
 Charles City Western  
 Columbia & Cowlitz  
 Cowlitz Chehalis & Cascade  
 Des Moines & Central Iowa  
 Fort Dodge Des Moines & Southern  
 Kansas City Kaw Valley & Western  
 Marinette Tomahawk & Western  
 Milwaukee Electric Ry & Transport  
 Pacific Coast

CHICAGO ZONE (Cont'd)

Chicago Milwaukee St. Paul & Pacific—(Cont'd.)  
 Fort Angeles Western  
 Port Townsend Southern  
 Tama & Toledo  
 Twin City  
 White Sulphur Springs & Yellowstone Park  
 Chicago River & Indiana  
 Chicago & Calumet River  
 Chicago Rock Island & Pacific  
 Ashley Drew & Northern  
 Burlington Muscatine & Northwestern  
 Cedar Rapids & Iowa City  
 Clinton Davenport & Muscatine  
 El Dorado & Wesson  
 North Louisiana & Gulf  
 Pittsburg County  
 Rock Island Southern  
 Chicago St. Paul Minneapolis & Omaha  
 Lake Superior Terminal & Transfer  
 Cleveland Cincinnati Chicago & St. Louis  
 Algiers Winslow & Western  
 Central Indiana  
 Cincinnati & Lake Erie  
 Indianapolis Union  
 Peoria & Eastern  
 Colorado & Southern  
 Denver & Intermountain  
 Great Western  
 Midland Terminal  
 Denver Rio Grande Western  
 Bamberger Electric  
 Bingham & Garfield  
 Carbon County  
 Colorado & South Eastern  
 Colorado & Wyoming  
 Colorado Railroad Inc.  
 Crystal River & San Juan  
 Rio Grande Southern  
 Salt Lake & Utah  
 Salt Lake Garfield & Western  
 San Luis Central  
 San Luis Valley Southern  
 Detroit & Mackinac  
 Erie & Michigan Railway & Navigation  
 Detroit Toledo & Ironton  
 Ohio & Morenci  
 Toledo & Indiana  
 Duluth South Shore & Atlantic  
 Copper Range  
 Mineral Range  
 Ferrocarril Kansas City Mexico y Oriente  
 Compania del Ferrocarril Nor-Oeste de Mexico  
 (Mexico Northwestern)  
 F. C. Mexicano del Pacifico  
 (Mexican Pacific)  
 Ferrocarriles Nacionales de Mexico  
 Compania del Ferrocarril Mexicana  
 (Mexican Railway)  
 Compania Ferrocarril Mexicano del Norte  
 (Mexican Northern)  
 Minatitlan al Carmen  
 Parral & Durango  
 Grand Trunk Western  
 Indiana Northern  
 Muskegon Railway & Navigation  
 Great Northern  
 Longview Portland & Northern  
 Minneapolis Northfield & Southern  
 Minnesota Western  
 Montana Western  
 Newaukum Valley  
 North Coast Transportation  
 Northern Pacific Terminal  
 Spokane Coeur d'Alene & Palouse  
 Waterville  
 Gulf Coast Lines  
 Gulf & Northern  
 Rio Grande & Eagle Pass  
 Rockdale Sandow & Southern  
 Texas Mexican  
 Gulf Colorado & Santa Fe  
 Beaumont Wharf & Terminal  
 Galveston Wharf  
 Houston Belt & Terminal  
 Texas City Terminal  
 Illinois Central  
 Aurora Elgin & Fox River  
 Cadiz  
 Canton & Carthage  
 Evansville & Ohio Valley  
 Evansville Suburban & Newburgh

SECONDARY RAILROADS (INDENTED) ARE ASSIGNED TO AND WILL INTERCHANGE EMBARGO INFORMATION DIRECT WITH PRIMARY ROADS UNDER WHICH LISTED

CHICAGO ZONE (Cont'd)

Illinois Central (Cont'd)	National Railways of Mexico
Fernwood Columbia & Gulf	(See Ferrocarriles Nacionales de Mexico)
Louisiana Southern	Northern Pacific
Mississippi & Skuna Valley	Butte Anaconda & Pacific
New Orleans Public Belt	Camas Prairie
Pullman	Craig Mountain
Sibley Lake Bisteneau & Southern	Duluth & Northeastern
Sioux City Terminal	Midland Continental
Springfield Terminal	Minnesota Dakota & Western
Waterloo Cedar Falls & Northern	Montana Wyoming & Southern
Indiana Harbor Belt	Nezperce & Idaho
(See Chicago River & Indiana)	Washington Idaho & Montana
International Great Northern	Northwestern Pacific
(See Gulf Coast Lines)	Arcata & Mad River
Kansas City Mexico & Oriente	California Western Railroad & Navigation
(See Ferrocarril Kansas City Mexico y Oriente)	Petaluma & Santa Rosa
Kansas City Southern	Oklahoma City—Ada—Atoka
DeQueen & Eastern	(See Midland Valley)
Kansas & Missouri Ry & Terminal	Pacific Electric
Kansas City Connecting	Harbor Belt Line
Kansas City Public Service	Pere Marquette
Kansas City Terminal	East Jordan & Southern
Oklahoma & Rich Mountain	Ludington & Northern
Sabine & Neches Valley	Manistee & Northeastern
Kansas Oklahoma & Gulf	Port Huron & Detroit
(See Midland Valley)	St. Louis-San Francisco
Louisville & Nashville	Birmingham Belt
Alabama & Western Florida	Cassville & Exeter
Alabama Power	Delta Valley & Southern
Artemus-Jellico	Mississippian
Birmingham Southern	Missouri & Kansas
Carrolton	Northeast Oklahoma
Flemingsburg & Northern	Oklahoma
Frankfort & Cincinnati	Okmulgee Northern
Gulfport & Mississippi Coast Traction	Quannah Acme & Pacific
Kentucky & Indiana Terminal	Sand Springs
Louisville & Jeffersonville Bridge	Sapulpa Union
Manistee & Repton	Southwest Missouri
Marianna & Blountstown	Texas Oklahoma & Eastern
Michigan Central	St. Louis Southwestern
Delray Connecting	Cairo Truman & Southern
Detroit Caro & Sandusky	Fordyce & Princeton
Detroit Terminal	Louisiana & Northwest
Wyandotte Southern	Paris & Mt. Pleasant
Wyandotte Terminal	Southern Pacific (Pacific Lines)
Midland Valley	Alameda Belt
Osage	Amador Central
Minneapolis & St. Louis	Bay Point & Clayton
Mason City & Clear Lake	California & Oregon Coast
Mound City & Eastern	Camino Placerville & Lake Tahoe
Minneapolis St. Paul & Sault Ste Marie	Carlton & Coast
Minneapolis Anoka & Cuyuna Range	Central California Traction
Minnesota Northwestern Electric	Clackamas Eastern
Missouri Kansas & Texas	East Bay Street Railways
Galveston Houston & Henderson	Fresno Traction
Hamlin & Northwestern	Holton Interurban
Roby & Northern	Howard Terminal
Wichita Falls & Southern	Los Angeles Jet.
Missouri Pacific	Magma-Arizona
Arkansas	McCloud River
Arkansas & Louisiana Missouri	Medford Logging
Augusta	Mexico Northwestern
Bauxite & Northern	Modesto & Empire Traction
Dardanelle & Russellville	Nacozari
Fort Smith Subiaca & Rock Island	Nevada Copper Belt
Graysonia Nashville & Ashdown	Oakland Terminal
Helena Southwestern	Oregon California & Eastern
Hutchinson & Northern	Oregon Pacific & Eastern
Lake Providence Texarkana & Western	Ray & Gila Valley
Louisiana & Pine Bluff	Sacramento Northern
Missouri Southern	San Diego & Arizona Eastern
Montana	San Francisco & Napa Valley
Murfreesboro-Nashville	Santa Maria Valley
Muskogee Electric Traction	Sierra
Natchez Urania & Ruston	Southern Pacific Railroad of Mexico
New Orleans & Lower Coast	Stockton Terminal & Eastern
Ouachita & Northwestern	Tonopah & Goldfield
Prescott & Northwestern	Trona
Reader	Tucson Cornelia & Gila Bend
St. Francois County	Valley & Siletz
Texas Pacific-Missouri Pacific Terminal	Ventura County
Tremont & Gulf	Virginia & Truckee
Union Ry of Memphis	Visalia Electric
Warren & Ouachita Valley	Williamina & Grande Ronde
Warren & Saline River	Yreka Western
Mobile & Ohio	Yuma Valley
DeKalb & Western	Southern Pacific (Texas & Louisiana Lines)
Mississippi & Alabama	Angelina & Neches River
Mississippi Eastern	Arkansas Harbor Terminal



**SECONDARY RAILROADS (INDENTED) ARE ASSIGNED TO AND WILL INTERCHANGE EMBARGO INFORMATION DIRECT WITH PRIMARY ROADS UNDER WHICH LISTED**

**CHICAGO ZONE (Cont'd)**

<p><b>Southern Pacific (Texas &amp; Louisiana Lines)—(Cont'd)</b>                  Bois D' Arc &amp; Southern                  Fredericksburg &amp; Northern                  Moscow Camden &amp; St. Augustine                  Nacogdoches &amp; Southeastern                  Port Isabel &amp; Rio Grande Valley                  Port Terminal Railroad Association                  Red River &amp; Gulf                  Texas South Eastern                  Uvalde &amp; Northern                  Waco Beaumont Trinity &amp; Sabine</p> <p><b>Spokane Portland &amp; Seattle</b>                  City of Prineville                  Klickitat Log &amp; Lumber                  Peninsula Terminal                  Portland Electric Power</p> <p><b>Terminal Railroad Association of St. Louis</b>                  Alton &amp; Southern                  East St. Louis Junction                  Litchfield &amp; Madison                  Manufacturers Railway                  St. Louis &amp; Belleville Electric                  St. Louis &amp; O'Fallon                  St. Louis &amp; Ohio River</p> <p><b>Texas &amp; Pacific</b>                  Eastland Wichita Falls &amp; Gulf                  Jefferson &amp; Northwestern                  Mansfield Ry &amp; Transportation</p>	<p><b>Texas &amp; Pacific—(Cont'd)</b>                  Marshall Elysian Fields &amp; Southeastern                  Roscoe Snyder &amp; Pacific                  Texas Electric</p> <p><b>Union Pacific</b>                  Big Creek &amp; Telocaset                  Condon Kinzua &amp; Southern                  Gilmore &amp; Pittsburgh                  Mount Hood                  Oregon &amp; Northwestern                  St. Joseph Belt                  South Omaha Terminal                  Sumter Valley                  Tonopah &amp; Tidewater                  Union Railroad of Oregon                  Utah Idaho Central                  Walla Walla Valley                  Yakima Valley Transportation</p> <p><b>Wabash</b>                  Lake Erie &amp; Fort Wayne                  Pioneer &amp; Fayette                  St. Louis &amp; Hannibal                  Winona</p> <p><b>Western Pacific</b>                  Deep Creek                  Quincy                  Tidewater Southern                  Tooele Valley</p>
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**WATER CARRIERS WHICH HAVE AGREED TO EXCHANGE EMBARGO INFORMATION THROUGH EMBARGO ZONE HEADQUARTERS**

**WASHINGTON EMBARGO ZONE**

**ZONE HEADQUARTERS:**

TRANSPORTATION BUILDING  
 17TH & H STREETS, NORTHWEST  
 WASHINGTON, D. C.

**ADDRESS:**

W. C. KENDALL, CHAIRMAN,  
 CAR SERVICE DIVISION,  
 ASSOCIATION OF AMERICAN RAILROADS

NAME OF LINE	NAME AND TITLE OF DESIGNATED EMBARGO OFFICER	ADDRESS
American Barge Line Company, Inc.	Andrew P. Calhoun, Vice Pres.	7 Wood Street, Pittsburgh, Penna.
Baltimore Steam Packet Company	T. B. Alfriend, G. F. A.	Pier 10, Baltimore, Md.
Bull Steamship Line	J. E. Jones, G. F. A.	Pier 5, Pratt St., Baltimore, Md.
Buxton Lines, Inc.	D. J. Foley, G. F. & C. A.	Norfolk, Va.
Chesapeake Steamship Company	A. J. Brannen, Traf. Mgr.	Light & Lee Sts., Baltimore, Md.
Cleveland and Buffalo Transit Co.	T. F. Cahill, G. F. A.	East 9th St. Pier, Cleveland, Ohio
Clyde-Mallory Lines	Geo. C. Bledsoe, Frt. Trf. Mgr.	Pier 34, North River, New York, N. Y.
Eastern Steamship Lines, Inc.	Edward K. Laux, Frt. Traf. Mgr.	Pier 25, North River, New York, N. Y.
Federal Barge Lines	Jno. F. Girault, G. F. A.	211 Camp St., New Orleans, La.
Great Lakes Transit Corporation	Frank P. Brady, Gen'l Agt.	787 Main St., Buffalo, N. Y.
W. E. Hedger Transportation Corp.	J. D. Ross, Vice Pres., Traffic.	120 Wall St., New York City
Isthmian Steamship Company	A. E. King, Traf. Mgr.	25 Broadway, New York, N. Y.
Merchants and Miners Line	H. P. Willmer, G. F. A.	112-114 South Gay St., Baltimore, Md.
Minnesota-Atlantic Transit Company	A. R. Sheff, Traf. Mgr.	275 Fuhrmann Blvd., Buffalo, N. Y.
Mooremack Gulf Lines, Inc.	R. B. Wallace, Traf. Mgr.	5 Broadway, New York, N. Y.
Newark Terminal & Transportation Co.	H. F. Reed, Genl. Agt.	Foot of Madison St., Newark, N. J.
Norfolk & Wash., D.C., Steamboat Co.	W. H. Callahan, Traf. Mgr.	Seventh St. Wharves, Washington, D.C.
Ocean Steamship Company of Savannah	T. N. Cook, Frt. Traf. Mgr.	Pier 46, North River, New York, N. Y.
Panama Pacific Line	G. E. Talmadge, Jr., Frt. Traf. Mgr.	1 Broadway, New York, N. Y.
Pan-Atlantic Steamship Corporation	R. A. Kearney, Jr., Vice Pres.	Merchants National Bank Bldg., Mobile, Alabama
Peninsular & Occidental Steamship Co.	Austin Williamson, Trf. Mgr.	P. O. Box 846, Jacksonville, Fla.
Philadelphia & Norfolk Steamship Co.	R. A. Merchant, Traf. Mgr.	Pier No. 3, N. Delaware Ave., Philadelphia, Pa.
St. Johns River Line Company	J. A. Bliss, Vice Pres.	Jacksonville, Fla.
Seatrains Lines, Inc.	Joseph Hodgson, First Vice Pres.	39 Broadway, New York, N. Y.
Southern Steamship Company	T. D. O'Brien, Traf. Mgr.	Broad St. Station Bldg., Phila., Penna.
Thames River Line, Inc.	V. L. Lepkowski, G. T. A.	Pier 31, East River, New York, N. Y.
Victor Lynn Transportation Company	W. T. Gardner, G. F. A.	Calvert & Poplar Hill Ave., Salisbury, Md.

**CHICAGO EMBARGO ZONE**

**ZONE HEADQUARTERS:**  
59 EAST VAN BUREN ST.,  
CHICAGO, ILL.

**ADDRESS:**  
W. D. BECK,  
ZONE EMBARGO CHAIRMAN

Alaska Steamship Company	L. W. Baker, Traf. Mgr., (See Pacific Coastwise Conference)	Pier 2, Seattle, Wash.
American-Hawaiian Steamship Co.	O. W. Lang, Traf. Mgr.,	Mackinac Island, Mich.
Arnold Transit Company	Keith C. Middleton, Mgr.	1232 Exchange Bldg., Seattle, Wash.
Border Line Transportation Company	(See The River Lines)	
California Transportation Company	(See Hammond Shipping Co., Ltd.)	
Christiansen-Hammond Steamship Line	(See Pacific Coastwise Conference)	
Coastwise Line	(See Pacific Coastwise Conference)	
Consolidated Olympic Line	L. W. Patterson, G. F. A.,	Foot of Wayne St., Detroit, Mich.
Detroit and Cleveland Navigation Co.	R. J. McLogan, Traf. Mgr.,	Foot of Griswold St., Detroit, Mich.
Detroit & Georgian Bay Nav. Co., Ltd.	A. C. Sullivan, Pres.,	208 So. La Salle St., Chicago, Ill.
Gartland Steamship Company	E. A. Read, Asst. Traf. Mgr.,	215 Market Street, San Francisco, Cal.
Gulf Pacific Line	(See Pacific Coastwise Conference)	
Hamond Shipping Company, Ltd.	(Address Company)	Vancouver, British Columbia
Kingcome Navigation Company, Ltd.	W. V. Pittman, Traf. Mgr.,	Cotton Exchange Bldg., Houston, Tex.
Lykes-Coastwise Line, Inc.	(See Pacific Coastwise Conference)	
McCormick Steamship Company	(See Puget Sound Freight Lines)	
Merchants Transportation Company	M. C. Pearson, G. F. A.,	320 N. Fourth Street, St. Louis, Mo.
Mississippi Valley Barge Line Company	F. J. Parker, Vice Pres.,	140 Twelfth Street, Detroit, Mich.
Nicholson Universal Steamship Co.	(See Pacific Coastwise Conference)	
Pacific Coast Direct Line, Inc.	H. C. Cantelow, Secy.-Mgr.,	311 California St., San Francisco, Cal.
Pacific Coastwise Conference	F. E. Lovejoy, Pres.,	Canadian National Dock, Seattle, Wash.
Puget Sound Freight Lines	C. R. Lonergan, Asst. to Pres.,	Colman Ferry Terminal, Seattle, Wash.
Puget Sound Navigation Company	J. H. Anderson, Traf. Mgr.,	Pier 3, Embarcadero, San Francisco, Cal.
River Lines	(See River Lines)	
Sacramento & San Joaquin Riv. L., Inc.	(See Nicholson Universal Steamship Co.)	
Spokane Steamship Company	Jno. J. Seid, Traf. Mgr.,	343 Sansome St., San Francisco, Cal.
Western Transportation Company	(See Pacific Coastwise Conference)	
Weyerhaeuser Steamship Company		

**MONTREAL EMBARGO ZONE**

**ZONE HEADQUARTERS:**  
487 ST. JAMES ST.,  
MONTREAL, QUEBEC

**ADDRESS:**  
C. P. RIDDELL,  
ZONE EMBARGO CHAIRMAN

Canada Steamship Lines, Ltd.	N. W. Van Wyck, Frt. Traf. Mgr.,	P. O. Box 100, Montreal, Que.
Canadian Pacific Car and Passenger Transfer Company, Ltd.	Frank W. Dubrule, Mgr.,	Prescott, Ont.
Northern Navigation Company	(See Canada Steamship Lines, Ltd.)	
Tree Line Navigation Company, Ltd.	F. O. Dayton, Managing Director	1010 Common St., Montreal, Que.

**LIST OF COMMODITIES CONSIDERED AS FOOD FOR HUMAN CONSUMPTION IN EXEMPTIONS TO EMBARGOES**

Baking Powder	Macaroni
Bakery Products of all kinds	Meal, cereal or vegetable, prepared for human consumption
Beans	Meat, fresh, canned, dried, pickled, or otherwise processed for human consumption
Butter and Butter Substitutes	Mince Meat
Canned Fruits and Fruit Products	Molasses
Canned Meats and Meat Products	Mustard
Canned Sea Foods	Nutmeg
Canned Vegetables and Vegetable Products	Nuts, edible
Cereals and Cereal Products in Bulk or Packages	Oils, edible
Chocolate	Olives
Cocoa	Pepper, all kinds
Coffee and Coffee Substitutes	Pickles
Condensed Foods	Poultry, live, dressed, canned or otherwise processed for human consumption
Condiments	Preserves
Confectionery	Rice
Dairy Products, including milk, cream, butter, cheese, etc.	Sago
Desiccated Foods	Salt
Eggs	Sauces
Essences for preparation of food	Sauer-Kraut
Extracts for preparation of food	Sea Food, all kinds, fresh, canned, dried, pickled, or otherwise processed for human consumption
Farina	Seasonings for food
Figs	Seeds, edible, fresh, dried or canned
Flavoring and flavoring extracts	Soda
Flour, all kinds	Soup, canned, powders, tablets or otherwise processed
Foods, prepared, including those given proprietary names	Spices
Food Extracts	Sprouts, barley or other grain or vegetables
Fowls	Sugar
Fruits, fresh, preserved, canned, dried, pickled or otherwise processed for human consumption	Syrups
Game	Tallow
Gelatine	Tapoca
Glucose	Tea
Grain	Vegetables, fresh, canned, dried, pickled or otherwise processed for human consumption
Grain Products used for food	Vermicelli
Grease, edible	Vinegar
Groceries	Water, drinking
Hominy	Yeast
Honey	
Hops	
Ice	
Ice Cream	
Lard and Lard Substitutes	

## APPENDIX IV

### PLAN FOR CONTROLLING PORT TRAFFIC

In the event the volume of traffic moving to and through any port becomes such as to require that restrictive measures be taken to avoid serious congestion and unnecessary detention of equipment, the Car Service Division of the Association of American Railroads, acting under authority of the Board of Directors, in accordance with Per Diem Rule 19, will place in effect a control system substantially in accordance with the following:

#### SCOPE OF CONTROL

Experience having demonstrated that conditions which make for congestion at any one of the North Atlantic ports—Portland, Me., to Hampton Roads, inclusive—will quickly affect all of them, it is contemplated that if and when control is considered necessary at any one of these ports, it will be made to cover all of them, each to the extent deemed necessary.

The control system will cover all roads serving a port. It will cover all traffic for, or intended for, export, except as specifically excepted. If necessary, it will be extended to cover coastwise or intercoastal movement and domestic freight for the port or ports. (See "A" for form of control.)

If and when conditions make it seem desirable that the movement of traffic be controlled at ports other than the North Atlantic ports—Portland, Me., to Hampton Roads, inclusive—such situations will be covered by separate instructions, under the direction of the Association of American Railroads, as occasion may require.

#### ORGANIZATION FOR HANDLING

To supervise traffic control placed in accordance with the above, the following organization will be established:

**MANAGER:** There shall be a Manager of Port Traffic, with office at New York, with appropriate secretarial force, who shall have complete authority with respect to the supervision of any control placed on traffic moving to or through any port. Releases authorizing movement of freight shall be issued only at his direction.

**ASSISTANT MANAGER:** If found necessary there shall be an Assistant Manager of Port Traffic, who will assist the Manager, performing such duties as may be assigned to him by the Manager. Because of the likelihood that the port of New York will be the center of activity, it is necessary that the Assistant Manager shall be thoroughly familiar with the physical layout of this port and the general flow of business in and through it.

**SECRETARY:** There shall be a Secretary, who shall be in charge of the office and who shall have complete charge of the mechanics of the issuing of releases at the direction of the Manager.

**ADVISORY COMMITTEE:** To assist the Manager in the supervision of the control established with respect to the North Atlantic ports—Portland, Me., to Hampton Roads, inclusive—an Advisory Committee will be appointed, consisting of five railroad representatives, which shall meet with the Manager and Assistant Manager as frequently as conditions may require. If found necessary, these railroad representatives will be detached from their regular duties and become employees of the A. A. R. during the period of the emergency. The personnel of this Advisory Committee shall be selected: One representing ports in New England; one, the entire New York Harbor area and Hudson River ports; one, Delaware River ports, including Trenton, Camden, Philadelphia and Wilmington; one, Baltimore and vicinity and one, Hampton Roads and the Potomac and James River ports. These representatives, while nominally representing these ports, will take an active part in the consideration by the Committee of situations at any and all of the ports.

**LOCAL COMMITTEES:** To assist the Manager and this Committee in the handling of situations at the ports, local committees will be established at the following points: For the New England ports—at Boston; for the Delaware River ports—at Philadelphia; for upper Chesapeake Bay ports—at Baltimore; and for Hampton Roads and the Potomac and James River ports—at Norfolk.

**LOCAL A. A. R. REPRESENTATIVES:** A representative of the Association of American Railroads will be stationed at each of these points and will act as the Chairman of the local committee, the personnel of which will be drawn from local railroad and other interests, as conditions may warrant. It shall be the function of these committees to keep the Manager and the Advisory Committee at New York fully advised of local conditions and, to the extent necessary and desirable, submit recommendations for the handling of the local situations.

In the New York Harbor area, an Operating Committee, working under the direction of the New York General Managers' Association, will be in constant contact with the Manager of Port Traffic and his Advisory Committee.

If and when control is made effective at ports other than the North Atlantic ports, above referred to, appropriate railroad representatives will be added to the Advisory Committee, and local committees, similar to those outlined above, will be formed, to the end that each local situation may be handled in a practicable and efficient manner.

## REPORTS

In order that releases may be issued in an intelligent manner, the Manager of Port Traffic will receive, not later than 11:00 A. M., daily, a report covering each controlled port.

For ports other than New York, the statement will be in such detail as the Manager of Port Traffic may direct, details to be determined later.

For the port of New York, it shall include substantially the following information (which is already being developed in part under the direction of General Managers' Association):

- A. Carfloat freight for N. Y. station delivery.
- B. Carfloat freight for N. Y. dock, B. E. D. T., Jay St. Term., Bush Terminal.
- C. Freight for N. J. terminal delivery.
- D. Eastbound carfloat freight interchange.
- E. Rail interchange eastbound freight.
- F. Tidewater coal.
- G. Company fuel coal.
- H. Grain.
- I. Brooklyn terminal companies.
- J. Lighterage freight, including delivery railhead to steamers.
- K. Freight in storage facilities, carloads.
- L. Storage space available, carloads.
- M. Cars held at outlying terminals awaiting movement to railhead.
- N. Number of boats (lighters, barges and carfloats) at steamship piers in excess of 48 hours awaiting delivery.

Under each of these headings shall be shown:

- (1) The number of cars released in the past twenty-four hours, and
- (2) The number of cars on hand at 7:00 A. M.

These items shall be subdivided as to commodities, and these in turn separated as to export, coastwise, intercoastal and domestic freight, to the extent to which the Manager of Port Traffic may require.

A statement showing the number of cars in transit or held out of the port by each road, separated as to commodities, etc., as may be required will also be furnished.

## RELEASES

**APPLICATION:** An application to release freight for any controlled port, will be submitted to the Manager of Port Traffic. Each application must contain the information shown on Form "B" attached.

A separate application must be filed for each shipment.

If it is necessary to control domestic freight for a port, instructions with reference to the filing of applications for releases will be issued at a later date.

**ISSUANCE:** A release applicable to a North Atlantic port (Portland to Hampton Roads, inclusive) will be issued only by the Manager of Port Traffic at New York. (See "C" for form of release.) When and if control is made effective at any other port, the method of handling releases will be covered in later instructions. Releases will be numbered and the shippers must show the release number on the bill of lading. The Agent at point of origin must show it prominently on the waybill.

November 7, 1939.

"A"

### SAMPLE FORM OF CONTROL NOTICE

Control Notice A. A. R. No.....

Effective: 12:01 A. M..... 19.....

On account of: All railroads.

Applicable to: All commodities, both carload and less carload, consigned, reconsigned, to be reconsigned, or intended for export via any port.

Exceptions: (1) Anthracite or Bituminous Coal;  
(2) Freight covered by a numbered release issued by the manager of Port Traffic, Association of American Railroads.

**NOTE:** The Control System will be made effective to cover such ports as conditions may require or as the situation may demand, and releases authorized accordingly.

ASSOCIATION OF AMERICAN RAILROADS

Form for Application for Release

(Street, City and State)

(Address of Applicant)

(Date)

To Manager of Port Traffic,  
Association of American Railroads,  
New York, N. Y.

Having received authorization from \_\_\_\_\_  
(Name of S. S. Line)

copy of which is attached, assigning space for the following freight, application is hereby made for a release authorizing its acceptance for movement via the port of \_\_\_\_\_

1. Originating road haul carrier \_\_\_\_\_
2. Station of origin \_\_\_\_\_  
(City) (State)
3. Last road haul carrier \_\_\_\_\_
4. Name of shipper \_\_\_\_\_
5. Name of consignee at Port \_\_\_\_\_
6. Export papers will be handled by \_\_\_\_\_  
(Name) (Company) (Address)
7. Final destination \_\_\_\_\_  
(City) (Country)
8. For shipment on \_\_\_\_\_  
(Name of vessel)
9. To Port of \_\_\_\_\_
10. Remarks \_\_\_\_\_

11. APPROXIMATE DESCRIPTION OF SHIPMENT

Number and Kind of Packages	Description of Goods	ESTIMATED		
		Net Weight	Gross Weight	Cubic Feet

I certify that the above is a true description of merchandise to be shipped

Signature \_\_\_\_\_

Capacity \_\_\_\_\_

INSTRUCTIONS: Applications will be received only when accompanied by satisfactory evidence from the steamship company that space has been reserved for the freight covered by this application.

**SAMPLE FORM OF RELEASE**  
(Covering acceptance of freight via port of New York)

**ASSOCIATION OF AMERICAN RAILROADS**

Release No. N. Y. \_\_\_\_\_

To Freight Agent: \_\_\_\_\_  
R. R.  
 \_\_\_\_\_  
 (Originating Station)

You are authorized to accept the following freight for movement via Port of New York:

1. Name of shipper \_\_\_\_\_
2. Name of consignee at Port \_\_\_\_\_
3. Export papers will be handled by \_\_\_\_\_  
(Name) (Company) (Address)
4. Final destination \_\_\_\_\_  
(City) (Country)
5. For shipment on \_\_\_\_\_  
(Name of Vessel and S. S. Line)
6. To Port of \_\_\_\_\_
7. Remarks \_\_\_\_\_

**8. APPROXIMATE DESCRIPTION OF SHIPMENT**

Number and Kind of Packages	Description of Goods	E S T I M A T E D		
		Net Weight	Gross Weight	Cubic Feet

Issued \_\_\_\_\_, 19\_\_\_\_\_  
(Date)

Expired \_\_\_\_\_, 19\_\_\_\_\_  
(Date)

(Facsimile signature)

\_\_\_\_\_  
 Manager, Port Traffic.

**INSTRUCTIONS:** The original of this release will be mailed to the Agent at point of origin and retained by him; one copy will be given the applicant; one copy will go to a designated representative of the originating carrier; one copy to a designated representative of the last road haul carrier and one retained in the file of the Manager of Port Traffic.