Rail Transport

Compared to other forms of cargo transportation, rail transport is quite safe. Rail transportation is capable of high levels of passenger and cargo movement while maintaining energy efficiency, but is often less flexible. Rail transport costs less than air or road transport, making it extremely cost effective for inland movement.

Common Terms in Rail Transport

Railcar	Any type of pre-made container designed for transportation of goods using rail locomotion. Railcars are unpowered, and require an engine to push or pull them. There are a variety of rail cars designed to accommodate a variety of shipping needs.
Engine	Powered vehicle that is operated by a pilot and is used to push or pull railcars over long distances. Engines can be electric, or powered by fossil fuels.
Full Carload	A volume of cargo that is capable of filling an entire rail car.
Less Than Carload	A volume of cargo that is less the volume required to fill an entire railcar.
Railyard	A large open area alongside train tracks where trains can be domiciled or repaired. Railyards are also where cargo loading and offloading operations occur.
Heavy Haul	Train cargo that is considered bulk or full cargo, as opposed to passenger rail vehicles or light rail (usually inner city public transport).
Interchange	The act of switching cars between one train and another.

Rail Transport Arrangements

Containerisation – much like sea freight, many railways can accommodate containerised cargo. There are no differences between the containers used in sea shipping and those use in rail shipping. The process of stuffing and sealing containers may occur at the shippers facility, or may occur at a consolidation point or forwarders facility. The same volume and weight restrictions apply to rail shipping using containerisation as they do to sea shipping.

Loose Shipping – shippers may wish to ship less than full rail car loads using rail, or may not have access to intermodal container shipping through the desired rail line. Cargo can still be shipped using a variety of rail cars. Sending palletised or loose cargo via rail is similar to sending cargo with a third-party trucking company – cargo will be loaded onto the train utilising pre-made and usually hard sided structures, and will be offloaded on the receiving end. Usually, shippers aren't even allowed into the rail yard to participate in the loading/offloading of rail cars, and will only see cargo as it's picked up outside the railyard, or once it's delivered to their facility. Securing shipping for loose cargo via rail can be done through any freight forwarder or broker, and rail lines may even have direct customer service.

Unique Concepts to Rail Transportation

Infrastructure Limitations - Rail transportation has a far limited scope compared to most other forms of cargo movement. The reality is rail movement needs specialised built out infrastructure – a rail network – that requires maintenance and is easily damaged by weather or conflict. Shippers utilising rail to move cargo have very few options – the size of railcars is limited by the overall size of the tracks, and freight trains have a fairly limited set of destinations. In many contexts where many aid agencies work and operate, there will likely not be a functioning rail network all together.

Inflexibility - Rail is very suitable for the movement of large load sizes over longer distances, but it lacks the versatility and flexibility of motor carriers since it operates on fixed track facilities. Rail can only provide services terminal to terminal, rather than point to point delivery services offered by trucking. Though rail transport offers an effective method of bulk haulage, it can be very slow, especially considering loading, offloading, and overall railyard operations.

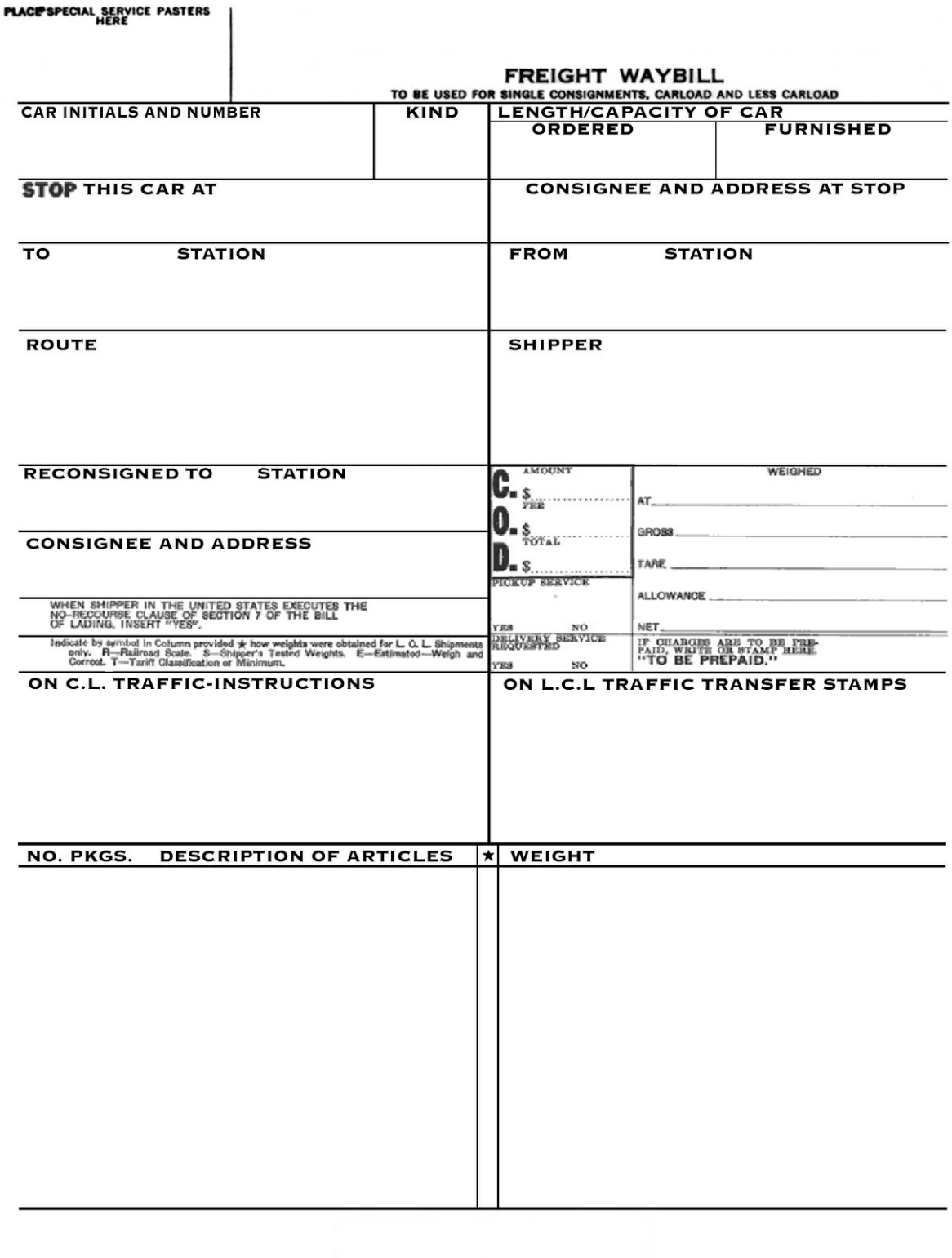
Sending Cargo by Rail

Rail Transport Documentation

Rail Waybill / Freight Waybill - Documentation for movement by rail is controlled through the rail waybill. Unlike a BOL, CMR or AWB, the rail waybill is a nonstandard, non fixed-format document. Rail waybills are typically created by and supplied by the rail line, and will contain locally relevant and important information.

The rail waybill is a non-negotiable document containing the instructions to the railway company for handling, dispatching and delivering the consignment. No other document is required for domestic shipments, however shippers may wish to include additional information such as a detailed packing lists. For international transport across borders, shippers should be made locally as to the proper documentation needed.

Example Rail / Freight Waybill:



PLACE SPECIAL SERVICE PASTERS HERE

FREIGHT WAYBILL

TO BE USED FOR SINGLE CONSIGNMENTS, CARLOAD AND LESS CARLOAD

CAR INITIALS AND NUMBER | KIND | LENGTH/CAPACITY OF CAR: ORDERED | FURNISHED

STOP THIS CAR AT | CONSIGNEE AND ADDRESS AT STOP

TO STATION | FROM STATION

ROUTE | SHIPPER

RECONSIGNED TO STATION

CONSIGNEE AND ADDRESS

C.O.D. AMOUNT $ FEE $ TOTAL $

WEIGHED AT GROSS TARE ALLOWANCE NET

PICKUP SERVICE YES NO

DELIVERY SERVICE REQUESTED YES NO

WHEN SHIPPER IN THE UNITED STATES EXECUTES THE NO-RECOURSE CLAUSE OF SECTION 7 OF THE BILL OF LADING, INSERT "YES".

Indicate by symbol in Column provided ★ how weights were obtained for L. C. L. Shipments only. R—Railroad Scale. S—Shipper's Tested Weights. E—Estimated—Weigh and Correct. T—Tariff Classification or Minimum.

IF CHARGES ARE TO BE PREPAID, WRITE OR STAMP HERE "TO BE PREPAID."

ON C.L. TRAFFIC-INSTRUCTIONS | ON L.C.L TRAFFIC TRANSFER STAMPS

NO. PKGS. DESCRIPTION OF ARTICLES | ★ | WEIGHT

Cargo Configuration for Rail Shipping

If not utilising intermodal shipping containers, shippers generally have very little control over how cargo is loaded, nor are there many special considerations while packaging cargo. Cargo may be shipped palletised or loose, however it may be in the best interests of the shipper to palletise and label cargo as much as possible to minimise loss or theft while in transit. Trains can haul heavy and large cargo, and are really only limited by excessively oversized items, such

as oversized construction equipment. Certain routes may be limited by tunnels or underpasses, so shippers should inquire with their forwarders about the overall limitation for shipping using a specific rail line.

The overall types of railcars used for shipping are:

Box Car – The most common form of pre-made purpose built rail car. Box cars are sealed on all sides and have hard, rigid structures with locking doors. Box cars need to be manually loaded, similar to the bed of a box truck.

Flat Car – A car without hard siding, used to transport wide or tall cargo such as vehicles and construction equipment. Flat cars can also house standard shipping containers. Flat cars can also be used for regular cargo, but would expose regular cargo more to the elements and theft.

Hopper Car – An open top box car with reinforced support under the long edges. Hopper cars are used for hauling large quantities of loose bulk items, such as grain, sand, ore, or anything non liquid that can be dumped directly into the body of the car. Offloading may be done by hand or MHE. Some hopper cars are capable of tilting to rapidly offload bulk cargo at once.

Tank Car – Can be low-pressure (liquid) or high-pressure (gas). Ideal for moving large volumes of liquid long distances. There may be restrictions on the liquid and gas types due to national and local laws and limitations on handling hazardous goods.