



RAILBLAZERS

ALLTRANSTEK, L.L.C.

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A CLOSER LOOK SERIES

Closer Look Series

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NAFCA vs. UNION PACIFIC

The Surface Transportation Board is currently reviewing a line haul complaint that could have profound effects on the cost of owning and using railroad tank cars. In a complaint filed on March 31, 2015 via STB Docket NOR 42114, the North American Freight Car Association (NAFCA), Chlorine Institute, Fertilizer Institute, and the American Chemistry Council have challenged the Union Pacific Railroad Company's (UPRR) adoption of "line haul" charges on behalf of its members. These charges apply to certain empty railroad tank car movements to and from repair shops and represent the first time UPRR has administered such mileage based charges for empty tank car moves to and from repair shops. Under this new tariff, "repair facilities" are broadly defined as, "any facility that cleans, relines, maintains, modifies, repairs, or retrofits tank cars." These items are explicitly set out in UPRR tariffs Nos. UPRR 6004-series

Item 55C, and UPRR 4703 series.

Charges were as high \$2.96 per car per mile when the tariff was initially imposed in January 2015. Shippers experienced a 3.5% increase in 2016, and UPRR recently announced it would again increase the charges by 3.5% starting January 1, 2017. These tariffs have substantially increased the cost to rail shippers and railcar lessors supplying tank car equipment to the UPRR for transportation to maintain and repair their fleets.

Prior to 2015, no other United States Class I railroad had implemented such charges for the empty movement of tank cars to repair shops. Class I railroads have historically been compensated for the empty movements of tank cars, including the empty movement of cars to repair shops, through mileage equalization payments (defined on page 2) calculated pursuant to a for-

Continued on page 2...

CAR TYPE HIGHLIGHT: TANK FLEET

Tank cars transport liquid and gas commodities, a unique capability compared to other car types. The tank fleet currently totals 408,470 cars, and is the second largest major car type segment in the North American fleet.

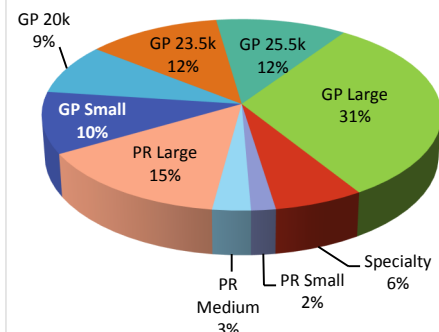
General purpose and pressure cars account for 93.5% of total tank car traffic. Specialty cars represent the remaining 6.5% of total tank car traffic.

Continued on page 4...

The North American tank car fleet is split into three segments: pressure car, general purpose, and specialty. Within these segments, cars are further differentiated based on capacity. Tank cars can be further differentiated based on the presence of coils, insulation, or other important service equipment.

The general purpose fleet is segmented into five categories: GP small, 20,00 gallon GP, 23,500 gallon GP, 25,500 gallon GP, and GP large. Of these, GP large make up the largest portion at 42% of general purpose cars. The pressure fleet is divided into three categories: small, medium, and large. Large pressure cars represent 76% of the pressure fleet.

All Tank Cars 2016 Fleet Size



Source: Umler, AllTranstek, 408,470 cars



PROGRESSIVE RAILROADING ARTICLES

AllTranstek's Chief Commercial Officer, Richard Kloster, will be featured by Progressive Railroading Magazine in the upcoming December 2016 issue. This marks Mr. Kloster's third article of the year for the magazine. The articles are:

April 2016 - Tank cars: The Year of the Shipper

This article discusses the increased auditing efforts of the FRA over 2016, and the compliance challenges posed to shipper tank car owners.

[Read the full article!](#)

July 2016 - Rule change could help ease box-car supply problem

With a box-car fleet that is not getting any younger, this article discusses a rule change which provides an opportunity for increased life of rail equipment.

[Read the full article!](#)

December 2016 - Rail Equipment Outlook 2017

As 2016 draws to an end, this article offers insight into the future of rail equipment throughout 2017.

Look for this article in the December 2016 issue of Progressive Railroading Magazine.

(RCM continued from page 1)

mula agreed upon by the industry and adopted by the STB. UPRR's tariff charges substitute the charges present in UPRR 4703 for the mileage equalization payments UP would otherwise receive.

NAFCA and the other complainants (which also include three rail shipper members of NAFCA), have alleged before the STB that UPRR's empty movement charges must be rescinded because they are unlawful and an unreasonable practice under 49 U.S.C. §10702. NAFCA argues that the decisions of the Interstate Commerce Commission (ICC) upon which UPRR relied to adopt the charges do not support its actions. These decisions date back to a 1987 ICC decision called General American Transportation Corporation v. Indiana Harbor Belt Railroad and involve instances where short line railroads, in certain limited circumstances, were permitted to adopt tariffs for the empty movement of freight cars to repair shops. The complainants in NOR 42144 argue that UPRR and other Class I railroads cannot avail themselves of the "limited exception" recognized by the ICC in the Indiana Harbor and related decisions.

They also argue that even if the principles of that decision were applicable, UPRR cannot meet the requirement that the imposition of a separate tariff charge for empty movements must also be accompanied by compensation to the tank car provider in the form of mileage allowances calculated through the National Mileage Allowance Agreement in Tariff RIC 6007 – Series.

In essence, the mileage equalization process grants benefits to those tank car shippers whose loaded shipments exceed their empty movements. Under traditional equalization practices, if loaded miles exceed empty movement distance (plus an additional 6%), then that shipper will not incur mileage penalties. Charges only apply to empty miles that exceed this threshold. The argument of the shipping community in this case, is that all empty movements are now subject to penalization without compensation for loaded miles under the new tariffs. The charge that UPRR is not presently compensating tank car providers for the use of shipper cars is set out in a second count of the STB complaint.

In March of 2015, the BNSF Railway adopted a tariff similar to UPRR's. Formal challenges to the BNSF tariff have not yet been filed at the

STB. On December 21, 2015 the STB denied a motion by UPRR to either dismiss the complaint or to make its allegations more definite. Since then, the parties have been involved in a prolonged discovery period prior to the preparation and submission of evidence. This discovery period has included the successful attempt by UPRR to obtain information from certain members of one of the Association complainants, even though the members are not officially parties to the case. Such "non-party" discovery is uncommon at the STB.

The outcome of this case will have significant ramifications for the industry, as the imposition of these tariff charges by UPRR has increased the cost of shipping tank cars by the thousands of dollars per car for some UPRR shippers. BNSF customers who supply tank cars are bearing similar costs. If the UPRR tariff is found to be lawful, then this ruling would likely also apply to the BNSF's tariff, leading other railroads who transport railroad tank cars to follow suit. Depending on the outcome of the case, the STB's action could also lead to the reopening of the National Mileage Allowance Agreement, which was negotiated by the industry, and adopted by the ICC as a regulation, in 1986.

KEY DEFINITIONS

Mileage equalization payments: Railcar owners owe penalties to railroads for excessive empty miles traveled. Invoices can be audited to ensure accuracy and prevent unnecessary fees.

National Mileage Allowance Agreement: Rates of pay for excess miles run above the basic day will not result in any form of wage increase and will not exceed applicable rates. Implemented June 30, 1986.

49 U.S.C. §10702: Rail carriers under the jurisdiction of the STB must establish reasonable rates, divisions of joint rates, and classification for transportation and service, as well as rules and practices on matters related to that transportation or service.

General American Transportation Corporation v. Indiana Harbor Belt Railroad: Any railroad generating revenue by loaded movements of privately owned freight cars may not lawfully assess additional charges for empty miles traveled by said railcars and must participate in the equalization process.

TANK CAR COMMITTEE UPDATE

Transport Canada is revising Standard TP14877. Transport Canada announced that part of the revision will include a one year phase out of non-normalized TIH tank cars. The phase out would begin from the published date of TP14877 in Gazette II (summer of 2017).

The FRA discussed Railworthiness Directive 2016-01. The main topic covered the inspection requirements established in the directive and the NDT requirements to inspect for defects.

The FRA discussed hinged and bolted covers and the number of NAR's due to improper securement. The 3 areas of focus for the upcoming year will be:

- *Shippers must establish and use procedures to properly inspect and secure hinged and bolted manway covers after loading and unloading tank cars.*
- *Tank car facilities must follow the car owners' qualification and maintenance procedures when working on tank cars.*
- *Tank car owners must collect and analyze qualification and repair data to verify correct inspection intervals.*

Reported OTMA's are up from last year. Currently about 50% of the "bad ordered" cars in tank car facilities have OTMA's. The industry is on pace to hit approximately 10,000 OTMA's for 2016.

SUPPLIER MOMENT: VIRGINIA AND CAROLINA SEAL

For years Virginia Sealing Products (VSP) and Carolina Seal, Inc. (CSI) have been key suppliers to the tank car industry. Back in the day one might have thought of them as competitors since they both provided "sealing and engineering solutions" to the tank car market. In fact, both VSP and CSI thought the same way... But a funny thing happens when a shared client has a problem that needs solving... competitors can turn into partners in order to better serve the customer. This is the story of how, with a little help from a friend, the RideTight® program came to be.

The initial introduction of the two companies started back in the early 2000's, when each company had a supplier contract in place with Eastman Chemical's world headquarters in Kingsport, TN. At the time, VSP and CSI management considered one another to be competitors, even though the companies were contracted to supply different types of products—VSP focused on gaskets and Carolina Seal focused on O-Rings and valve repair kits. Over the years, the two companies demonstrated a great deal of mutual respect and support for one another while supporting a common customer. In 2002, after assisting Eastman and Rescar with a manway gasket issue on site in Kingsport, TN, VSP began to realize they could utilize their gasket expertise to assist others in the tank car industry.

Due to an existing relationship with Rescar, VSP was introduced to Alltranstek in 2003, who began helping to introduce the young company to the tank car market thereafter.

After meeting with a significant AllTranstek customer to discuss the customer's needs for a comprehensive fluid sealing solution, VSP turned to Carolina Seal to help utilize CSI's niche expertise with the O-Rings and Valve Repair Kit requirements. AllTranstek continued to consult the newly developed partnership on the tank car market, NDT best practices, and generally how the bundled component offering by Carolina Seal and Virginia Seal would be perceived and evaluated in the marketplace. This collaboration resulted in the birth in 2005 of "The RideTight® Program".

The RideTight® Program is a comprehensive fluid sealing management product and service offering that takes a structured "Best Practices" approach to eliminating the variables that have historically contributed to NARs (Non-Accidental Releases). Both companies agree that the gaskets, O-Rings, and Valve Repair Kits themselves are really a by-product of the engineering service benefits both companies offer to clients. From chemical and mechanical compatibility analysis work, to optimal material selection assistance with compliance, documentation and traceability tools, this program is a great deal more than just the supply of Gaskets and O-Rings/Valve Repair Kits. The cornerstone of the RideTight® program is rooted in a commitment to training and education, while back-end support also includes Root Cause Failure Analysis Reporting. With an increase in regulatory requirements, the need for improved compliance, documentation and traceability tools and the on-going industry goal of reducing the frequency of NARs, the RideTight® Program has proven to be a successful solution for addressing industry concerns.



2017 Schedule of Events

MARS Winter Meeting

Oak Brook, IL

Jan. 11-12

National Industrial Transportation League Summit

San Diego, CA

Jan. 30 - Feb. 1

ELFA

Houston, TX

Feb. 25-27

SWARS 2017 Annual Meeting

Galveston, TX

March 1-2

Railroad Day on Capitol Hill

Washington, DC

March 2

Rail Equipment Finance Conference

La Quinta, CA

March 5-8

National Grain and Feed Association

New Orleans, LA

March 8-9



2016 Closer Look Year-End Sale

AllTranstek and FTR Intel present the 2016 Closer Look series, the rail industry's most thorough and comprehensive rail equipment forecast report designed to optimize investment decisions.

From now until December 31st, 2016, buy Closer Look reports for \$3,750 each. Gain insight into fleet demographics and projected deliveries to prepare for the new year.

Contact Chad Perrewé for more information.

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(Continued from page 1)

Large GP cars account for 31% of the total tank car fleet and account for more traffic than any other fleet segment, with a 39.6% traffic share. These carloads are primarily ethanol and crude petroleum shipments. Across all tank cars, chemicals and petroleum products

combined to represent nearly 77% of traffic.

Because tank cars are used for shipping liquid or gas products and are one-way cars that lack pooling opportunities, shippers are responsible for supplying their own tank car equipment. As a result, 99.7% of all tank cars are owned by leasing companies and shippers. Recent trends have shown an increase in lessor ownership of tank cars at the expense of shipper owned cars.

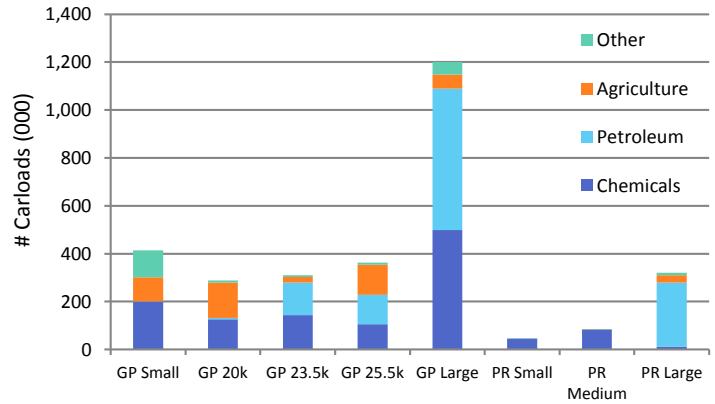
Highly active energy markets over the past few years sparked an increase in tank car production. This growth has caused the tank car fleet to remain relatively young as the median age

Are you a tank car owner interested in decreasing penalties for empty miles traveled by your fleet? The of mileage equalization process saves tank car owners money by auditing mileage reports generated by the railroads. This process is typically to be completed by year end. However, previous years can be revisited and applied against the next upcoming invoice.

Mileage equalization begins with mileage credits. For each move a railcar makes on one railroad in one month, an accounting record called a "mileage credit" is created by the railroad in order to track mileage for each individual car. Mileage credits contain a wealth of data, including loaded mileage, empty mileage, mileage rates, movement information, and much more. As discussed above, recording and tracking mileage credits determines how much the car owner must pay the railroad in equalization penalties for moving empty cars. After the railroad collects, regulates, and distributes mileage credits, through Railinc, the owner is informed how much is owed per car. Empty miles can add up quickly and turn into a costly nightmare, especially for car owners with a large fleet.

By tariff, the car owner is responsible for paying

Tank Car Traffic by Equipment Type



Source: 2014 STB Waybill; 3,027,621 carloads

and average age of this fleet has decreased.

Utilization for tank cars, which bottomed at 50.4% in 2001, has averaged 77.1% over the last 20 years. Utilization of the tank car fleet further spiked throughout the crude-by-rail (CBR) boom. However, with a wealth of new car deliveries over the last 5 years contributing to a serious car surplus, and the rail share of the CBR market slipping due to pipeline competition, the fleet's surplus and utilization metrics are suffering. A large portion of the tank car fleet has moved into storage.

All charts and graphs come from the Tank Closer Look Report

CAR ACCOUNTING & MILEAGE EQUALIZATION

the railroad equalization penalties. However, car owners who wisely seek out the expertise of car accountants to audit railroad invoices can avoid paying unnecessary fees. AllTranstek's car accounting team verifies if the railroads' invoices are accurate by thoroughly analyzing mileage data for car owners and shippers across their various car marks. When errors are found in the equalization audit, AllTranstek's car accounting experts manage the claims process from start to finish.

Performing an audit may reveal substantial financial implications for car owners. For example, a railroad might present a car owner with an invoice stating that the car owner must pay \$96,000 for 100,000 empty miles traveled, as the US penalty is \$0.96 per mile. An audit may discover that in fact only 60,000 empty miles were traveled resulting in a \$57,600 invoice and \$38,400 saved.

AllTranstek's car accounting team specializes in saving thousands, and in some cases millions, of dollars for customers. By assuring accuracy of records, our car accounting team maximizes savings for tank car owners.

EMPLOYEE SPOTLIGHT

Dinora Guzmán

Account Manager

Dinora leads the car accounting department out of the Houston, Texas office. She is a University of Houston graduate who began her rail industry career in 2003 in mileage auditing and equalization. She joined AllTranstek in 2005. Dinora manages daily operations in the office as well as coordinating and supervising an array of audits and accrual reporting. Dinora recently hosted an educational webinar on Mileage Equalization.



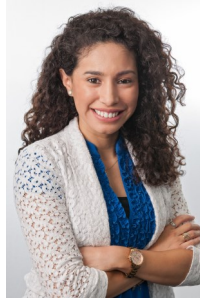
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Iris Balmaceda

Mileage Auditor

Iris joined AllTranstek in 2014 after graduating from Sam Houston State University in 2013. She performs a wide variety of audits including equalization, rental, mileage, and lease, as well as overseeing the approval of invoices for customers. Iris co-hosted the recent Mileage Equalization Webinar in which she discussed the importance of mileage auditing as well as how the detailed process works.



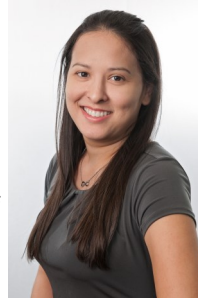
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Daisy Rangel

Mileage Auditor

Daisy has been with AllTranstek since 2013. She holds a degree in business administration and accounting from the University of Houston. Combined with her previous experience as an accountant and financial specialist, Daisy provides clients with a high level of expertise for which AllTranstek is well known. As a mileage auditor, Daisy completes audits on behalf of clients in order to maximize their savings.



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RSI FIBERGLASS INSULATION APPROVAL

The FAST Act went into effect on December 4, 2015. It required parts of 49 CFR to be updated, specifically regulations covering DOT 117 spec tank cars. These changes required the DOT 117J (new build) and non-jacketed DOT 117R (retrofit) tank cars to have at least 1/2 inch thick thermal protection blankets.

Existing DOT 111 spec tank cars that were already insulated and jacketed were not explicitly covered under the Final Rule published after the FAST Act. The regulation only specified that the DOT 117R needed to meet thermal protection requirements of 49 CFR. These requirements can be met by a prescriptive standard (application of a 1/2 inch thick thermal blanket) or by a performance standard (thermal modeling of the protection).

In February 2016, the RSI Committee on tank cars requested FRA approval to use fiber-glass insulation as a thermal protection system on existing jacketed tank cars up for retrofit. RSI held the position that the jacket and insulation

would meet the performance standard described by 49 CFR, a 100-minute pool fire simulation model. The FRA and PHMSA determined that approval for car usage in flammable liquid service is not required, so long as the performance based requirements of 49 CFR are met. These parties have reviewed the RSI analysis, and determined the jacket and fiber-glass insulation on pre-existing DOT 111 cars is sufficient.

This allows car owners with existing jacketed DOT 111 specification tank cars to retrofit cars without having to strip the existing jacket and insulation and apply new thermal protection, insulation and jacket. Car owners are able to save as much as \$25,000 to \$26,000 per retrofit for an existing jacketed DOT 111 car with fiber-glass insulation. Car owners still need to perform the thermal modeling to prove 49 CFR is met, apply head shield protection to the end of the car, and meet the remaining retrofit requirements (DOT 117R) of 49 CFR.



AllTranstek Presentations and Events 2016-2017

“Mileage Equalization”

Date: November 16, 2016

Location: AllTranstek

Format: Webinar

Contents: This presentation discussed the cost-saving benefits of the mileage equalization process. Available via replay.

Presenter: Dinora Guzman

[Click here for replay!](#)

“Rail Equipment: A Market in Transition”

Date: February 26, 2017

Conference: ELFA
Equipment Mangement

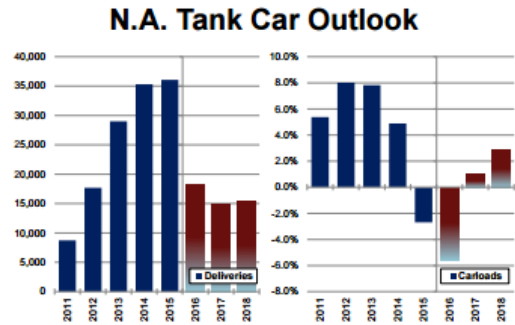
Location: Houston, TX

Format: Presentation

Contents: This presentation discusses the transition of rail equipment markets from an energy dominated build cycle, to a more traditional replacement driven demand cycle. Join AllTranstek’s Richard Kloster and Mitsui Rail Capital’s Chris Gerber as they discuss drivers of the various fleet segments and the railcar outlook for 2017.

FTR OUTLOOK: TANK FORECAST

- ◆ **Freight:** Tank car traffic forecast to decrease 5.6% y/y to 3.1 million carloads in 2016, grow at 2.4% AAGR over 2017-2020 to 3.4 million by 2020.
- ◆ **New Cars:** Deliveries forecast to fall 49.8% y/y in 2016 to 18,000 cars, decline 17.7% in 2017, average 15,867 cars per year 2018-2020.
- ◆ **Inventory:** Retirements projected to be high, averaging 24,500 each year due to forced retirements per regulations, retirements projected to fall to 11,200 cars per year.
- ◆ The fleet is projected to total 376,500 cars in 2016, down 1.5% y/y, decline 1.7% in 2017, increase at a 1% AAGR over 2018-2020 to 384,700 by 2020.
- ◆ Surplus expected to jump to 126,300 cars in 2016, fall to 91,000 in 2019, climb back to 94,500 in 2020.



Source: FTR; Copyright 2016

Tank Car Market Indicators: 2016Q2

Actual, Not Seasonally Adjusted	2015 Q3	2015 Q4	2016 Q1	2016 Q2
Orders	1,463	1,176	660	3,192
% Change, Y/Y	-81.8	-92.1	-85.2	2.3
Backlogs	38,454	30,789	25,550	24,424
% Change, Y/Y	-25.5	-46.6	-51.2	-47.3
Deliveries	8,849	8,341	5,885	4,318
% Change, Y/Y	-4.2	-5.5	-39.4	-52.9
Backlogs/Deliveries Ratio	4.3	3.7	4.3	5.7
Net Orders/Deliveries Ratio	0.2	0.1	0.1	0.7

Source: ARCI Committee of the Railway Supply Institute

- ◆ Fleet utilization forecast to fall 10.2 points in 2016 to 66.6%, improve to 75.6% in 2019, falling down to 74.9% in 2020.
- ◆ **Forecast Changes:** Lower freight, higher surplus, lower utilization, lower deliveries.
- ◆ **Downside Risks:** Weak economic conditions, low oil prices, low drilling activity and investment, high surpluses.
- ◆ **Upside Risks:** Non-crude tank car replacement demand, improvement in oil prices.

All charts, graphs, and data are derived from the FTR Rail Equipment Outlook Report
For more information on this report, please visit www.frintel.com/REO

A CLOSER LOOK SERIES

A Closer Look Series is comprised of six individual reports, each of which exclusively covers one of the major car types: Covered Hoppers, Tank Cars, Gondolas, Open Top Hoppers, Box Cars, or Flat Cars. These reports provide invaluable information and insight for longstanding rail equipment industry participants, as well as new entrants to the industry. Among the companies who will benefit the most are fleet owners, leasing companies, new car builders, component suppliers, service providers, financial institutions, investors, rail carriers and shippers.

A Closer Look Series examines the current railcar market from multiple angles, analyzing trends in fleet size, age, ownership, segmentation, commodity traffic bases, new car deliveries, retirements, utilization, attrition, car surpluses, and much more.

[Click here for more information on A Closer Look Series](#)



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Founded in 1994, AllTranstek has grown into one of North America's largest railcar management and consulting companies, currently managing over 250,000 railcars for some of the country's largest fleets. AllTranstek also provides technical, operational, and strategic consulting services to a broad range of companies active in the rail and rail equipment supply chains. No other company has the combination of institutional knowledge, innovation, and independence that characterizes AllTranstek. As an independent company, with no ties to outside funding from industry or government, our clients can be confident that we always have their best interests in mind. AllTranstek continues to cultivate strong relationships with clients both large and small because of our ability to creatively and flexibly tailor services of various sizes and scopes to each customer's individualized needs.