Touchbase

May 2014

In This Issue

Visit us at:
www.tealinc.com

Congratulations to our outstanding 2014 scholarships recipients!

Tealinc Announces 2014 Scholarship Winners!

Tealinc, Ltd., an adamant supporter of post-secondary education providing over $20,000 in scholarship at local and national level over the past several years, is pleased to announce the two recipients for our 2014 scholarships!

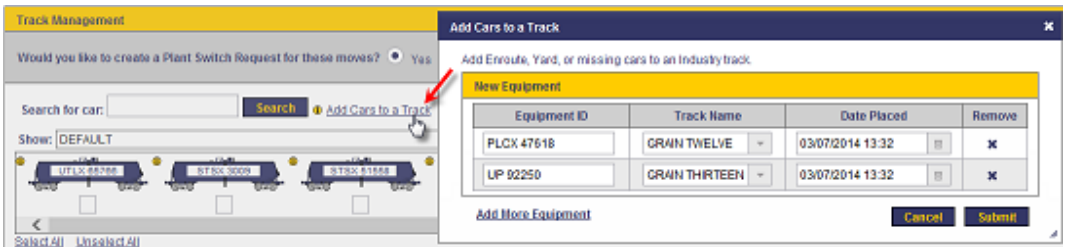
You can click on each scholarship winner to learn more about her. Congratulations to this year's winners!

- **Shannon Costello**
- **Kendall Blackwood**

Railroad & Policy Updates

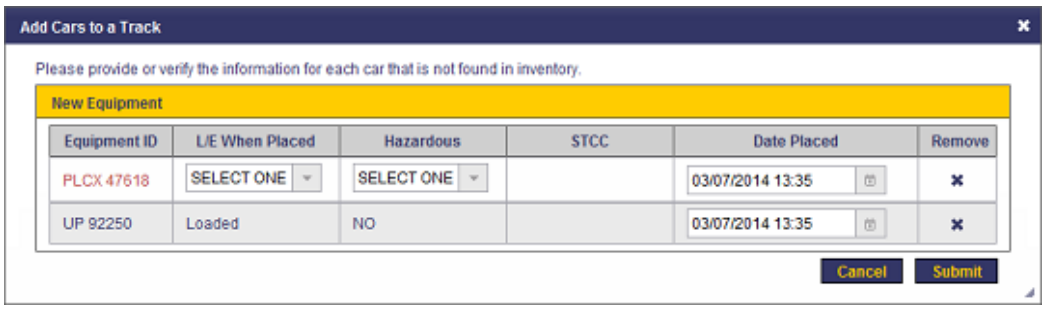
Announced via email April 28, 2014, ShipCSX Manage Inventory tool has been enhanced with an improved "Add Cars to a Track" feature. In addition to updating cars from an Enroute or Yard status to a track in Industry status, this feature will also support adding railcars that are missing from inventory. Add railcars to improve inventory management and request switches as needed.

To use, simply select '"Add Cars to a Track" to open a pop-up and enter the Equipment ID, Track Name, and the Date Placed information.



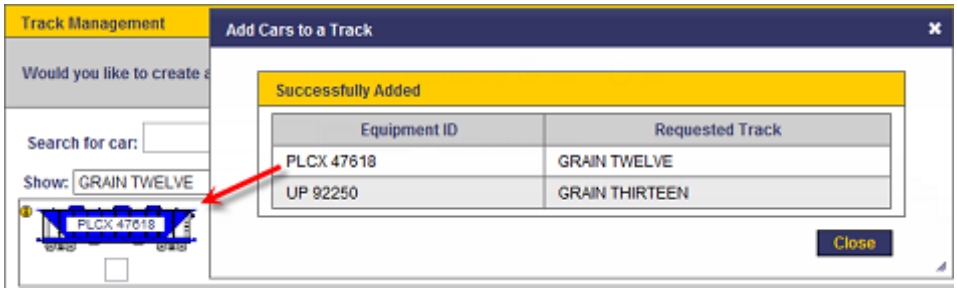
Adding a railcar that is missing from the inventory will require additional information to be verified or entered, such as the Load/Empty status, when the car was placed to industry, if the car contains hazardous material or residue, and STCC commodity code if hazardous.

ShipCSX manage inventory updates



Once railcars have been successfully added, they can be viewed on the respective track for further action as needed.

...been enhanced with an improved "Add Cars to a Track" feature.



The Manage Inventory tool is part of the Plant Switch suite of tools found under the Ship tab.

To request access, CSX advises that you call 1-877-ShipCSX, option 2.

Mechanical Brief with Steve Christian

Plain friction bearings to roller bearings: how the rail industry has evolved!

In April, a customer asked me to look at some in-plant open top hoppers for my evaluation of the cars. They were 70 ton cars that were grossly overloaded – so much that the hopper doors could not open all the way because they would contact the top of the rail first. I could go on and on about the problems I found with these cars; however, I would rather talk about something that brings back a lot of memories for me. That something is the plain (friction) bearing trucks that I found on these cars.

Railcars and switch locomotives in the early 1970's (and even further back) were predominately supplied with plain bearing trucks. Here is a quick description of the friction bearing system.

- The pedestals of each side frame has a journal box cast into it
- The end of the wheel axle, called the journal, is machined to a very smooth finish and there is a collar on the outboard end that serves to keep the bearing components in place.
- The bottom of the journal box is rounded and has a lubricating pad saturated in car oil. The oil would be wicked up through the pad to the underside of the journal. The oil would then be carried by the rotating journal to the bearing babbitt to keep the bearing lubricated.
- Above that are journal stops on each side that keep the pad in place.
- On top of the journal is the bearing (the Brass). The bearing is made of brass and has a babbitt lining on the surface which makes contact with the journal. Above the bearing is a wedge. The wedge distributes the weight of the car evenly to the bearing and hence the journal.
- There is a seal (Dust Guard) that surrounds the axle at the back of the journal box.
- The front of the journal box has a spring loaded lid that is equipped with a rubber box lid seal.

Plain bearings worked well for many years

Plain bearings worked well for many years. Unlike roller bearings, plain bearings needed extra attention at every railroad inspection point.

- Car inspectors carried a packing hook which lifted box lids and could reposition lubrication pads within the journal box.

- The inspector would look for standing oil in the bottom of the box. If there was no standing oil, oil was added. The seals were inspected to ensure they were in place and not damaged.
- The inspector would also look for signs of overheating such as discoloration.
- My leadman always required me to remove my glove and run my finger nail along the length of the journal to check for grooves. Then I would run my finger tip along the journal to check for roughness and contaminants (dirt and grit).
- Any indication that there could be a problem with the continued safe operation of the bearing required the car to be switched out of the train.

All crew members would look at their side of the train periodically to look for smoke or even fire coming from the railcar trucks

In those days there was a four person crew on every train. There was the engineer and a front brakeman that rode in the locomotive and a conductor and a rear brakeman that rode in the caboose (called a waycar on the Burlington back in those days). All crew members would look at their side of the train periodically to look for smoke or even fire coming from the railcar trucks. If there was any smoke at all, the train was stopped and a brakeman would carry some bars of Texaco hotbox coolant and a packing hook to the smoking bearing. The coolant was placed in the journal box. It would cool the bearing and leave a slick lubricant coating which could allow you to limp to the nearest siding to set the car out. If the journal got too hot it could become so soft that it would "burn off" and derail the train.

Whenever a train passed the railroad working crews, would stop what they were doing a watch it roll by

Besides the railcar inspectors and train crews, everyone that worked on or near the tracks was trained to watch trains as they passed for smoking bearings and other defects. Whenever a train passed the railroad working crews (track inspectors, track maintenance crews, bridge crews, signal maintainers and even Carmen working on a set out track) would stop what they were doing and watch it roll by. If all was okay, they would signal the caboose with a "High Ball". A High Ball was your hand raised up straight over your head. If there was a smoking bearing or some other serious issue, you could stop the train by hand signals to the conductor or rear brakeman. If you were unsure of what you saw, you would find a call box and call a dispatcher to explain your concern. The dispatcher would then relay the concern to the crew by radio.

Even with all of the attention on plain bearings by inspectors, train crews and all railroad employees, the change-out rate for wheels due to overheated bearings was pretty frequent. We would change them out on remote sidings using air jacks, a knock down "A" frame, trolleys and chain hoists along with many parts and manual tools required to complete the job. By the time you traveled to the siding, set everything up, changed the wheelset, performed a set and release of the air brakes, picked everything up, packed it on the road truck and traveled back to the shop, you had spent all day.

For someone like me that has seen the evolution of

Today is a different story. Plain bearings are no longer allowed in interchange service. Roller bearings and roller bearing rebuilding have evolved to a point where the chance for bearing failure before a wheelset is changed out for some other defect is very rare. The railroads have used technology to detect wheel and bearing defects early which adds to the

railcar and locomotive bearings, I am amazed at how far we have advanced in the last 40 something years. I am excited to see what advances in our industry lie ahead

performance of bearings on the railroads. For someone like me that has seen the evolution of railcar and locomotive bearings, I am amazed at how far we have advanced in the last 40 something years. I am excited to see what advances in our industry lie ahead.

The Tealinc Team has many years of diversified railroad transportation experience and knowledge. Allow us to share them with you.

Steve Christian is the Manager Value Creation-Railcar Performance Manager for Tealinc, Ltd. You may contact Steve directly out of our Nebraska office at (308) 675-0838 or via email at ***steve@tealinc.com****.*

Railroad Traffic

AAR reports increased traffic for March 2014

The Association of American Railroads (AAR) reported April 3, 2014 increased U.S. rail traffic for March 2014, with both carload and intermodal volume increasing compared with March 2013. Intermodal traffic in March totaled 1,025,907 containers and trailers, up 9.9 percent (92,661 units) compared with March 2013, and the 52nd-consecutive year-over-year monthly increase for intermodal volume. The weekly average of 256,477 intermodal units on U.S. railroads in March 2014 was easily the highest for any March in history and was the fourth highest for any month in history. Meanwhile, U.S. carload originations totaled 1,156,697 in March 2014, up 3.5 percent (38,628 carloads) over March 2013.

Eleven of the 20 commodity categories tracked by the AAR each month saw year-over-year carload increases in March. Commodities with the biggest carload increases included grain, up 14,272 carloads or 21.2 percent; coal, up 9,649 carloads or 2.2 percent; crushed stone, sand and gravel, up 4,454 carloads or 5.6 percent; and petroleum and petroleum products, up 4,524 carloads or 8.2 percent.

Commodity categories with carload declines last month included iron and steel scrap, down 2,602 carloads or 13.7 percent; metallic ores, down 1,345 carloads or 7.1 percent; and steel and other primary metal products, down 874 carloads or 2.1 percent.

Excluding coal and grain, carloads were up 14,707 carloads, or 2.9 percent, in March 2014 over the same month last year.

Commodities with the biggest carloads were grain, coal crushed stone, sand and gravel, and petroleum and petroleum products

"U.S. rail traffic rebounded strongly in March 2014 following a sub-par February. Grain led the way, as railroads are working hard to move the biggest grain harvest in history," said AAR Senior Vice President John T. Gray. "In addition, coal carloads rose in March, something that's happened just one other time in the past two years. March also demonstrated that we have every reason to be optimistic that 2014 will break 2013's intermodal volume record."

Visit the AAR at:
https://www.aar.org/newsandevents/Freight-Rail-Traffic/Pages/2014-04-03-railtraffic.aspx#.U024DPnIbVY

Overbooked China diverts soybean shipments to the U.S.

...some Chinese importers used soybean import contracts to access credit in China's tight leading environment

"The idea that it is better for shipments to be coming to the U.S.

Industrial Inside

It appears that overbooked Chinese soybean importers have diverted shipments to the United States, split between deliveries to the East Coast and the Gulf of Mexico.

Data Transmission Network (DTN) analysts report that three industry sources in the U.S. and Brazil say that 20 cargos, or roughly 18.4 million bushels, that were originally booked for delivery to China were sold to the United States in the April.

One source noted that China rolled another 20 shipments to a later delivery date. Another source added that an additional six or seven cargo loads could be on their way to the U.S. soon.

"The global soybean situation is interesting because the U.S. doesn't have the supplies to meet its current commitments and China has overbooked," DTN Senior Analyst Darin Newsom said. "The result is an equally interesting coming and going of ships leaving port in the U.S. headed to China while at the same time, China may be redirecting some of its purchases from Brazil to the U.S."

An article in the Wall Street Journal on March 27 in the morning highlighted that private Chinese importers were backing out of deals on soybeans and rubber, "adding to a wide range of evidence showing rising financial stress in the world's second-biggest economy."

The article went on to say: "But now as jitters rise over the health of the economy, the fallout is rippling through into agricultural commodities, just weeks after the price of copper and iron ore tumbled on worries they had been used in risky Chinese financing deals." (**You can read more here**)

Those risky Chinese financing deals -- China's made them on soybeans, too. DTN China Correspondent Lin Tan explained in an article in late January that some Chinese importers used soybean import contracts to access credit in China's tight lending environment. Here's an explanation from that article:

"Companies have found they can get credit from the bank much easier by using soybean import contracts as collateral because it's normal import business. For example, a soybean importer signs a contract to buy beans, takes it to the bank and gets a loan. Often, they sell the beans to another crusher, or if the price is right, they'll cancel the contract and use the funds for other purposes."

China's soybean crushing margins are negative right now, another reason why they don't want more cargos to show up at their docks. After several years of rapid expansion, Tan told DTN there are two kinds of companies that could go bankrupt in this kind of market: the ones with no experience, and the companies that bought soybeans for financial reasons.

His sources in China indicate that at least three soybean crush companies could default on Brazilian bean purchases at a rate of about 10 cargos a

now rather than waiting for early summer…"

piece.

The diverted shipments to the U.S. point squarely to tightness of U.S. domestic supplies. Newsom said USDA's projected 35 mb of imports would fall well short of allowing the U.S. to meet its commitments. To do so would require at least two to three times that amount.

"The idea that it is better for shipments to be coming to the U.S. now rather than waiting for early summer is spot on," Newsom said. "Again, it is another indication of just how tight U.S. supplies are and how tight merchandisers are expecting them to get. By June we would be scraping the bottom of the bins, leading to a skyrocketing inverse in the futures spreads and extremely strong basis. This way it may be a more orderly short supply rally into summer."

Read the entire article at:
http://www.dtnprogressivefarmer.com/dtnag/view/ag/printablePage.do?ID=BLOG_PRINTABLE_PAGE&bypassCache=true&pageLayout=v4&blogHandle=grainmarkets&blogEntryId=8a82c0bc43a1ab8d0145056aa3350dd7&articleTitle=Overbooked+China+Diverts+Shipments+to+the+U.S.&editionName=DTNAgFreeSiteOnline

Financial Focus

U.S. economy slows to stall-speed

The U.S. economy stalled in the first three months of 2014, but don't panic yet as it's probably just the winter weather effect.

Gross domestic product, the broadest measure of economic activity, grew at a 0.1% annual pace in the first quarter, the U.S. Bureau of Economic Analysis reported April 30, 2014.

That's brutally slow, even by sluggish post-recession standards. Since the Great Recession ended in June 2009, the economy has been growing at a rate of about 2% to 3% per year.

Economists think the slowdown is merely a temporary phenomenon due to harsh winter weather. If that theory holds true, the economy should bounce back in the spring.

"Take this report with a grain of salt," said Brett Ryan, U.S. economist for Deutsche Bank. "It's certainly not a good report, but there's plenty of evidence of a weather impact."

Economists think the slowdown is merely a temporary phenomenon due to harsh winter weather

Slumps in exports, housing and business investment, especially on equipment, were the main drivers behind the weak performance. All those things can be slowed by snow, hail and other winter storms as shipments are delayed or construction is put on hold.

In contrast, people are still buying things. Consumer spending continues to be a bright spot, growing at a 3% annual pace.

Consumers shelled out more money on health care, in particular. The Bureau of Economic Analysis noted that the health care increase was driven primarily by the implementation of the Affordable Care Act.

A separate report released showed the private sector added 220,000 jobs this April

Government's official jobs report expected to show hiring at its highest since November

Consumers also spent more on utilities probably because of the cold temperatures, but they cut back on clothing, household furnishings and eating out at restaurants.

Today's GDP figures are based on incomplete data, and will be revised at least three times in the next few months.

Bring on the spring comeback

Looking ahead, this week brings the first glimpse at how the economy fared in April, and the numbers should finally be clear of weather-related distortions.

A separate report released April 30 showed the private sector added 220,000 jobs this April, according to payroll processor ADP (ADP, Fortune 500). That's the strongest job growth since November.

The government's official jobs report, due out on May 2, is also expected to show hiring at its highest since November. Economists surveyed by CNNMoney predict the U.S. economy added 205,000 jobs in April. They also expect the official unemployment rate to fall to 6.6%, down a notch from 6.7% in March.

In the meantime, the Federal Reserve is widely expected to remain in "wait-and-see" mode, in the hopes of getting a clearer picture of U.S. economic strength. So far this year, Federal Reserve Chair Janet Yellen has blamed much of the weak economic data on the weather.

The Fed has been buying bonds to stimulate the U.S. economy on and off since 2008, but the central bank is now gradually bringing that program to an end. The wind-down process is known as "tapering," and the latest round is expected to reduce bond purchases to around $45 billion a month.

Learn more at:
http://money.cnn.com/2014/04/30/investing/gdp-economy/index.html?iid=SF_E_River

The Edge

The Surface Transportation Board ("STB") has recently issued a decision (Docket No EP 707) clarifying who may charge demurrage and who is responsible to pay demurrage. This important accessorial railroad charge pertains to shippers and receivers of railcars both loaded and empty and is one of the most hotly contested accessorial charges in the rail industry. Demurrage is a charge incurred when railcars are delayed beyond a specified time frame by the party receiving delivery of the railcars for either loading or unloading. The STB is adopting final rules pertaining to who may charge demurrage and who is subject to demurrage.

Decided April 9, 2014 and extracted verbatim from STB Docket No EP 707, "The Board is adopting final rules establishing that a person receiving rail cars from a rail carrier for loading or unloading who detains the cars beyond the "free time" provided in the carrier's governing tariff will generally be responsible for paying demurrage, if that person has actual notice, prior to rail car placement, of the demurrage tariff establishing such liability. The Board also clarifies that it construes the provisions of 49 U.S.C. 10743,

title 'Liability for payment of rates,' as applying to carriers' line-haul rates, but not to carriers' charges for demurrage."

These rules will be effective July 15, 2014.

Simple Interpretation
The simplest interpretation of these new rules are, "if you are supplied a demurrage tariff or supplied electronic or paper access to a demurrage tariff by your handling rail carrier but are not a party to the waybill as consignee or consignor and you receive and detain railcars beyond the free time, you are subject to paying the applicable demurrage charges."

Demurrage Intent
Demurrage intent is to create a system of penalties (and sometimes rewards) for shipper or receivers of loaded and empty railcars. Railroads allow a shipper or receiver a specified amount of time called "free time" to load or unload railcars expeditiously. This free time and subsequent penalty or reward system keeps the use of railroad supplied railcars fluid and available for other shippers and receivers in the rail industry network. Railroads are required through Interstate Commerce Act and the Interstate Commerce Commission (ICC), a predecessor organization to the STB, to establish reasonable rates and transportation related rules and practices to compute demurrage and to establish demurrage related rules and practices "in a way that fulfills the national needs related to" freight car use and distribution that will promote adequate railcar supply. Demurrage in its simplest form is assessed on the consignor (the shipper of the goods) for delays in loading cars at origin and on the consignee (the receiver of the goods) for delays in unloading cars and returning them to the carrier at destination.

The Disconnect
Demurrage rules seem pretty straight forward. As it applies to railroad owned or controlled railcars, you get to use so many free days to load or unload a railroad supplied railcar as governed specifically by each individual railroad. As it applies to private owned or controlled railcars, if you store or set out a private owned railcar on railroad property because you can't (or don't) take it on your property due to congestion or other delay reason these railcars are also subject to individual railroad rules.

The disconnect primarily comes into play when the person loading or unloading the railcar is not a party to the freight transaction, e.g. a trans-load operator, warehouseman or other third party who's only role is to load or unload railcars. Generally this person is responsible for multiple-parties freight and doesn't have a solid forecast as to when railcars will arrive or depart due to the nature of his business. Sometimes the results are that several different types of commodity trans-loads will be required representing a variety of clients during the same railcar unload or load timeframe. In other instances the change in railroad performance in moving loaded and empty railcars will impact the arrival and departure of railcars causing bunching or congestion at either the origin or destination location resulting in a demurrage charge being levied through no fault of the railcar recipient.

In the private railcar demurrage case the disconnect is either service caused, e.g. the railroad is bunching loaded or empty railcars that are out of cycle to a shipper/receivers requirements, or a shipper or receiver simply doesn't have sufficient track space to

accommodate all of his railcar requirements. One demurrage event is caused by the railroad and the other demurrage event is caused by the receiver.

Notification of Demurrage Rules and Application
The STB, in its rulemaking, consented that railroad notification of demurrage rules per Docket EP 707 are sufficient if delivered electronically to each potential demurrage recipient. In short, if you ship or receive railcars you should get a notification of your responsibility to adhere to demurrage rules and to pay demurrage charges. This notification should be received before the July 15, 2014 inception date.

Additionally if railcars are constructively placed or actually placed at your facility you will have responsibility for demurrage as it applies specifically to your delivering rail carrier.

If a customer receives notice of a demurrage event and is deemed responsible by the railroad and desires to dispute the charges or event on which the charges are based, the STB has retained its alternative dispute resolution process and encourages first an interaction between the customer and handling rail carrier. Absent a satisfactory resolution a customer may appeal to the STB for resolution.

Comparison of Major Railroad Demurrage Rules
The following table compares demurrage rules across major US Railroads. It is important to keep in mind that this comparison is at a very high level and does not take into account railcar and commodity type nuances, nor does it address each unit train commodity type nuance or specific requirements. We encourage you to research your specific railcar and commodity situation by reading the applicable carrier demurrage tariff that applies to your situation.

Carrier	Tariff	Free Days (general)*	Demurrage Charges	Private Car Storage Charges
BNSF	6004-B	1load / 2 unload	$75/car/day	$75/car/day
UP	6004-C	1load / 2 unload	$80/car/day	$70/car/day
CSXT	8100, Section VIII	1 load / 2 unload	$90/car/day	$40/car/day
NS	6004-C	1 load / 2 unload	$100/car/day	$60/car/day

*see referenced tariff for applicable rates for railcar types, commodities and unit train application

Conclusion
Demurrage and private railcar storage charges are commodity, geographic and carload type versus unit train type specific. If you receive or ship commodities by rail it behooves you to do your homework and become knowledgeable in demurrage application, rules and regulations imposed by your handling rail carrier. The recent STB decision only requires that railroads provide you with their demurrage and private railcar tariff not necessarily interpretation of the tariffs application to your situation. Planning for and implementing procedures to prevent demurrage events can save you a substantial amount of money.

We look forward to earning your business!