-OUTSOURCE→

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THE SOURCE

Inside this issue

Cover Story:

Hours Of Service rule changes PROPOSED

♦ Rare Earth metals processing in Texas ♦ FedEx investing in Memphis	2
♦ Fuel Report ♦ Trivia ♦ Diesel prices keep falling	3
Small Plates—Maritime News ♦ Sulfur Oxide emissions What are they? ♦ "scrubbers" (?) installed on ships ♦ Help for our health	4
Small Plates—Items of Interest ♦ $15K fine for misdeclare ♦ LTL truckers choose $$$ over volume ♦ EMC buys big new ships	5
Small Plates—Logistics ♦ ATA Freight Transportation Forecast 2019—2030 (+++) ♦ Cardboard Problem: is there a solution?	6
Small Plates—Innovation ♦ Ocean carriers experiment with wind & battery power to reduce emissions	7
Special Feature: TRENDS ♦ Peter Friedmann's "View from D.C."	8

Federal Regulators Propose Changes to Trucker Work-Hour Rules

Under the newly proposed rules, commercial truck drivers could split their required 10-hour rest period into two separate breaks

by Jennifer Smith, WSJ, Aug. 14, 2019

Highway safety regulators are proposing changes to rules that limit truckers' daily driving hours, shifts they say would give drivers more leeway over their time behind the wheel and save millions of dollars. Federal regulations limit most commercial truck drivers to 11 hours of driving time in a 14-hour workday, restrictions intended to reduce accidents caused by highway fatigue. A recent rule requiring truckers to electronically track their hours behind the wheel has made compliance easier to monitor. Some trucking companies and drivers who own and operate their big rigs, however, complain the current rules lack flexibility and don't account for issues drivers have little control over, such as unexpected traffic or long wait times at loading docks, that eat into their 14-hour workday. Others, including safety advocacy groups and the International Brotherhood of Teamsters, have cautioned that altering the rules could increase driver fatigue and the risk of crashes.

Under a plan the Federal Motor Carrier Safety Administration released Wednesday, commercial truck drivers could split their required 10-hour rest period into two separate breaks instead of having to take it all at once. Neither break would count against their 14-hour on-duty window. Drivers would be able to stop the clock for another off-duty break of between 30 minutes and three hours, time they could use to nap or wait out rush-hour traffic instead of staying on the road. The proposed changes also include extending drivers' maximum on-duty period by two hours in the event of adverse conditions such as severe weather.

FMCSA, an agency of the Transportation Department, estimates the changes would save motor carriers about $275 million annually over a 10-year period, according to the proposed rulemaking. The agency says the trucking industry, which generated nearly $800 billion in revenue last year, is a key component of the national economy, adding the changes are intended to provide greater flexibility for drivers without compromising road safety. "These are all tied to what drivers are finding in their daily work—congestion, parking issues, unexpected adverse conditions that may arise," FMCSA Administrator Raymond Martinez said in a call with reporters Wednesday. "They need some level of flexibility that allows them to work around."

The Owner-Operator Independent Drivers Association, which represents independent truckers, called the rules "a common-sense approach" that would make it easier for drivers to avoid heavy traffic, bad weather and other "less than ideal situations." The American Trucking Associations said the proposed changes maintained the hours-of-service rule's core principles. The trucking industry trade group looks forward to "studying and understanding how these proposed changes will impact our industry so we can provide relevant data and information to strengthen and support a good final rule that bolsters safety and provides drivers needed flexibility," ATA Chief Executive Chris Spear said in a statement. Teamsters union General President Jim Hoffa said in a statement that the union had "serious concerns" about the plan, adding: "In an effort to increase so-called 'flexibility' for trucking companies, the FMCSA is abandoning safety and allowing drivers to push themselves to the limit even further."

The FMCSA expects to publish the proposed rulemaking in the Federal Register Monday, setting off a 45-day public comment period.

-OUTSOURCE- THE FREIGHT MANAGEMENT COMPANY

This CEO Wants to Extract Rare Earths From Trade Fight

By Rhiannon Hoyle, WSJ, Aug. 14, 2019

Amanda Lacaze's small company is working to break up China's dominance in the sector.

The rare-earths company that Amanda Lacaze runs is small, but her mission is immense: weaning the West off its dependence on China for the obscure metals needed in high-tech gear including cellphones, electric cars and jet fighters. As chief executive of Lynas Corp., the 58-year-old Ms. Lacaze leads the world's largest producer of rare earths, such as neodymium and praseodymium, outside China, which mines them from a collapsed volcano in western Australia and refines them in Malaysia. She is now pushing to expand capacity with plans to build a Texas processing plant.

Lynas's position in the rare-earths supply chain gives it a critical role in the trade conflict between Washington and Beijing. China, which controls about 85% of refined global supplies, hinted earlier this year that it might restrict exports of such minerals. If that happened, Ms. Lacaze says it would expose gaps Lynas wouldn't be able to immediately fill, particularly in heavy rare-earth elements that are the most scarce and vital for making powerful magnets and lasers.

Ms. Lacaze has made a career of confronting crises. When the former telecom executive took over as CEO in 2014, high debt and

FedEx announces $450 million investment in Memphis hub; total investment hits $1.5 billion

Max Garland, Memphis Commercial Appeal Published 10:59 a.m. CT Aug. 2, 2019

FedEx is investing an additional $450 million into the FedEx Express World Hub in Memphis, company officials announced Friday. The hub based at the Memphis International Airport is in the midst of a modernization plan announced in 2018 to pivot the hub more toward new technologies and automation. With the additional investment announced Friday, that plan will total $1.5 billion. FedEx said the additional investment is because of "growing customer demand" in a news release. The project is expected to wrap up by 2025 "with significant job creation along the way," according to the Tennessee Department of Economic & Community Development.

"As we announced in 2018, the hub project represents the next chapter in a long-term commitment in investing in the city of Memphis and the state of Tennessee," said FedEx Express CEO Don Colleran. The project calls for the construction of a large new sorting facility, "state-of-the-art" sort systems, construction of a bulk truckload building and a new area to better handle oversized shipments in-demand due to the e-commerce boom, Colleran said. FedEx employs around 11,000 people at the hub, who support an operation that handles hundreds of thousands of items every hour.

Gov. Bill Lee, who was on hand for the announcement, said the additional investment solidifies the logistics giant's presence in the Memphis community. "Not only do they employ 40,000 people in the state of Tennessee, but companies come here in greater measure because of the commitment of FedEx and the expansion of this commitment," Lee said. Over the past year, FedEx Express has pointed to a slowing global economy as the driver of less-than-stellar financial results. FedEx Express hub activity showed a year-over-year decline in June, the same month it cut U.S. ties with Amazon. FedEx attributed the drop to a variety of factors. In May, Lee signed a bill awarding FedEx more than $21 million in tax breaks over seven years for the hub project. The legislation, which saw an amendment introduce the FedEx tax break, means the state loses $16 million in tax revenue while local government would lose $5.1 million, the Tennessean reported. Lee said with the investment FedEx is making in its Memphis hub and what it does for the state overall, incentives are appropriate. "They are a major contributor to what happens in this state," Lee said of FedEx. "So our office, our administration, has regular communication about what they're doing and what their plans are and what we can do to create a business environment not only for FedEx, but for every company."

FedEx officially began operations at the Memphis International Airport in 1973, employing fewer than 400 people at the time. Memphis International Airport remains North America's busiest cargo airport thanks to FedEx, which handles the vast majority of cargo there. FedEx's second national hub facility in Indianapolis is also getting a big investment: $1.5 billion for a significant expansion.

Transportation Management
Multi-modal Service
Carrier Management
Auditing Services
Supply Chain Coordination

Supply Chain Management
Supply Chain Engineering;
Collaboration;
Leadership
Strategic Management
Consulting

Profit Improvement Plan
Leverage Opportunity Analysis
Baseline Measurement
Profit Improvement Measurement

TRIVIA QUESTIONS

1) What is the longest river in the United States?
A. Colorado **B.** Mississippi **C.** Rio Grande **D.** Missouri

2) Which of the Great Lakes is entirely within the US border?
A. Lake Superior **B.** Lake Huron **C.** Lake Michigan **D.** Lake Erie

3) What U.S. state boasts the following rivers: the Guadalupe, Trinity, Rio Grande, Brazos, and Colorado?
A. Colorado **B.** Texas **C.** Oklahoma **D.** California

4) Which mountain is the tallest in the United States?
A. Mt. Hood **B.** Mt. Ranier **C.** Denali (Mt. Mckinley) **D.** Pikes Peak

5) Which is the longest undammed US river?
A. Androscoggin **B.** Yellowstone **C.** Red River **D.** Cascade River

6) What river is the oldest in North America?
A. Catawba River **B.** Colorado River **C.** Hudson River **D.** New River

Answers Later In The Newsletter

FUEL REPORT

U.S. On-Highway Diesel Fuel Prices* (dollars per gallon) http://www.eia.gov/petroleum/gasdiesel/

	8/05/19	**8/12/19**	**8/19/19**	**Change from week ago**	**Change from year ago**
U.S. National Average	$2.688	$2.624	$2.598	↓-0.026	↓-0.223

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Diesel prices creep downward

By Matt Cole, CCJ (Commercial Carrier Journal) @MattColeRR August 13, 2019

The average price for diesel fuel across the U.S. continues to creep downward, dropping 2.1 cents in the week ending Aug. 12, according to the Department of Energy's weekly update. The U.S.' average price for a gallon of on-highway diesel is now $3.011, the lowest since mid-February. Since the beginning of 2019, fuel prices have only fluctuated by about a quarter, and prices are now flat with prices at the beginning of the year.

Prices fell in all regions across the country during the most recent week with the largest decrease being seen in New England, where prices dropped by 3.4 cents. The nation's most expensive fuel can be found in California at $3.909 per gallon, followed by the Central Atlantic region at $3.215 per gallon. The cheapest diesel can be found in the Gulf Coast region at $2.763 per gallon, followed by the Lower Atlantic region at $2.904 per gallon.

Prices in other regions, according to DOE, are:
New England – $3.073
Midwest – $2.924
Rocky Mountain – $2.94
West Coast less California – $3.164

ProMiles' numbers during the same week saw fuel prices fall by 1.4 cents to $2.922 per gallon nationwide. According to ProMiles' Fuel Surcharge Index, the most expensive diesel can be found in California at $3.827 per gallon, and the cheapest can be found in the Gulf Coast region at $2.785 per gallon.

Sulphur 2020 – cutting sulphur oxide emissions

(from the IMO website) http://www.imo.org/en/MediaCentre/HotTopics/Pages/Sulphur-2020.aspx

The main type of "bunker" oil for ships is heavy fuel oil, derived as a residue from crude oil distillation. Crude oil contains sulphur which, following combustion in the engine, ends up in ship emissions. Sulphur oxides (SOx) are known to be harmful to human health, causing respiratory symptoms and lung disease. In the atmosphere, SOx can lead to acid rain, which can harm crops, forests and aquatic species, and contributes to the acidification of the oceans.

Limiting SOx emissions from ships will improve air quality and protects the environment. IMO regulations to reduce sulphur oxides (SOx) emissions from ships first came into force in 2005, under Annex VI of the International Convention for the Prevention of Pollution from Ships (known as the MARPOL Convention). Since then, the limits on sulphur oxides have been progressively tightened.

From 1 January 2020, the limit for sulphur in fuel oil used on board ships operating outside designated emission control areas will be reduced to 0.50% m/m (mass by mass). This will significantly reduce the amount of sulphur oxides emanating from ships and should have major health and environmental benefits for the world, particularly for populations living close to ports and coasts.

Some ships limit the air pollutants by installing exhaust gas cleaning systems, also known as "scrubbers". This is accepted by flag States as an alternative means to meet the sulphur limit requirement. These scrubbers are designed to remove sulphur oxides from the ship's engine and boiler exhaust gases. So a ship fitted with a scrubber can use heavy fuel oil, since the sulphur oxides emissions will be reduced to a level equivalent to the required fuel oil sulphur limit.

350,000 teu of world boxship fleet in drydock for scrubber installations

July 31st, 2019 by Sam Chambers, Splash 24/7

The number of boxships withdrawing from service for scrubber installations has surged in recent weeks and is set to climb further in the coming couple of months, according to research carried out by Alphaliner. Based on Alphaliner's fleet survey as per 30 July 2019, at least 31 vessels are currently undergoing scrubber retrofits, with a total capacity of 350,000 teu out of service as a result. "The number of ships withdrawn for scrubber retrofits is expected to increase further in the coming months, with more than 550 additional ships expected to be retrofitted," Alphaliner noted in its most recent weekly report.

Delays to scrubber retrofits mounting

August 16th, 2019 Sam Chambers, Splash 24/7

Lawyers are set to be one of the main early beneficiaries from the start of the global sulphur cap with Splash receiving multiple reports from across the world of shipyards falling far behind in their scrubber retrofitting schedules. The retrofits have taken longer than anticipated with many owners and managers confiding that they have experienced unforeseen technical glitches as they get their exhaust gas cleaning systems installed ahead of the January 1 start of the sulphur cap. "This is a relatively new technique, so it seems that the size of task was underestimated," one Singapore-based shipping consultant told Splash today.

What was marketed as taking less than a month off-hire is now regularly seeing ships in Chinese yards waiting for up to 60 days to get the new funnel equipment installed. In its latest weekly report Alphatanker, part of AXS Marine, noted: "The past few weeks have seen a number of tonnage owners release statements indicating that their scrubber retrofitting programs were falling behind schedule. Notably, Diamond S Shipping has revealed that scrubbers on 3 of its Suezmaxes will not be fitted until 1Q20, from the original estimate of 4Q19. Meanwhile a number of non-publicly listed companies have revealed to Alphatanker that certain Chinese yards are running behind schedule due to the longer-than-expected installation time of scrubbers."

With installations entering their peak phase for the coming three months, delays are expected to worsen. The scrubber delays were predicted earlier this year by Greek brokers Intermodal who noted in a May report that almost all the shipyards worldwide were close to their maximum capacity. Of concern for owners, Intermodal warned some shipyards have committed to accept more scrubber retrofits than they can actually accommodate, which will most probably result in greater delays. Last month, Alfa Laval, one of the main scrubber manufacturers, predicted more than 5,000 ships would end up going in for scrubber retrofits.

Hapag-Lloyd to fine shippers $15,000 per box for any misdeclared hazardous cargoes

August 7th, 2019 by Sam Chambers, Splash 24/7 With misdeclared hazardous cargoes sparking many dangerous fires on boxships around the world, Germany's top liner has taken severe action – imposing a fine of $15,000 per wrong container. Hapag-Lloyd suffered a high-profile fire on of its ships, Yantian Express, earlier this year, that raged for weeks and caused millions of dollars of damage. The new fines system comes into play from September 15. "To ensure the safety of our crew, ships and other cargo onboard, Hapag-Lloyd holds the Shipper liable and responsible for all costs and consequences related to violations, fines, damages, incidents, claims and corrective measures resulting from cases of undeclared or misdeclared cargoes," the German carrier stated in a note to clients.

Hong Kong's Orient Overseas Container Line (OOCL), now a unit of China-based Cosco, also detailed plans yesterday to crack down on misdeclared dangerous and hazardous cargo. OOCL said in a notice to customers that "we are aware that there had been an increasing number of marine incidents being reported in 2019, many of which were suspected of potentially carrying un-declared and/or misdeclared hazardous cargo", adding that "to ensure safety compliance on shore and at sea is met, OOCL will strengthen its Dangerous Cargo acceptance and container inspection policy by imposing additional verification before loading through selective or random inspections on dangerous goods and potential dangerous goods cargo." OOCL said any inconsistencies between the declared cargo in the documents and what was physically inside the container would result in a Hazardous Cargo Misdeclaration Fee, without indicating how severe the fine would be.

Depending on the type of deficiencies found in such a shipment, the container could be put out of service and the cargo might be put on hold where penalties may be imposed, and charges associated with the misdeclaration would be on the shipper's account. According to the Cargo Incident Notification System (CINS), nearly 25% of all serious incidents onboard containerships are attributable to misdeclared cargo. While the exact breakdown of cargo contents varies by container, it's well known that at any given time, between 5-10% of an average container ship's cargo is declared as hazardous goods and approximately 12% of global container trade comprises dangerous goods. However, it's nearly impossible to know how much dangerous cargo is undeclared, or misdeclared.

Commenting on the news from Hapag-Lloyd, Andy Lane, a container shipping consultant based in Singapore, applauded the initiative and urged other liners to follow suit. "The booking party is not always the payer, so they will need to ensure that the penalties are imposed or else it can become a toothless tiger. $15,000 will not cover the cost of accidents, but it might cover the cost of inspections and enforcement. All shippers should embrace this, as 99.9% suffer today due to errant actions of the 0.1%. The other carriers will need – and should – follow suit, as those errant shippers who consciously fail to declare will direct this scourge elsewhere. The is no priority higher than crew, ship and cargo safety," Lane told Splash.

Splash lead columnist Andrew Craig-Bennett has repeatedly urged for a different solution to solve the scourge of fires caused by dangerous goods. Craig-Bennett has called on all liners to stop charging higher prices to carry dangerous goods. "The incentive for shippers to lie disappears as soon as this is done. Yes, the shippers of harmless cargo will be subsiding the shippers of dangerous goods. But their own cargo will be more likely to arrive," Craig-Bennett wrote in an earlier opinion piece. Splash is awaiting responses from a host of other lines to see if there will be collective stance from the world's top carriers in issuing fines on misdeclared cargoes.

US LTL truckers battle for profits, not pallets

William B. Cassidy, Senior Editor JOC, Aug 07, 2019

XPO Logistics, ODFL and other LTL carriers made substantial gains in profitability in the second quarter, despite declining freight shipments.

A battle is raging among less-than-truckload (LTL) carriers alongside US industrial docks. But it's not a battle that shipper customers are accustomed to, especially those with long memories of past LTL rate wars. Ten years ago, LTL carriers fought to see which one of them could win business with the biggest pricing discount. In 2019, they're punching for profits.

The two motor carriers leading this battle, in the public sector, are the second- and third-largest LTL trucking companies: Old Dominion Freight Line and XPO Logistics. Both carriers improved their operating ratios — a measure of profitability — in the second quarter, boosting their operating profits, and in ODFL's case, net profits in a weak freight market. "We're implementing innovations in North American LTL to drive the next leg of profit improvement," said Bradley S. Jacobs, chairman and CEO of XPO Logistics. The former Con-way Freight is testing workplace productivity tools that XPO will roll out to all 290 LTL terminals this year, he said. The Ann Arbor, Michigan-based carrier is also developing a dynamic pricing system.

XPO reduced its operating ratio (OR) to 81.8 percent, down from 85.9 percent a year ago. Its adjusted operating ratio dropped to 80.3 percent. In Thomasville, North Carolina, ODFL cut its operating ratio to 77.9 percent in the second quarter, the lowest quarterly OR in its history and an improvement from 78.7 percent in the year-earlier quarter. "While we have seen general softness with demand and the economy continues to give us mixed signals, we believe we are continuing to win market share and are maintaining our price discipline while doing so," ODFL President Greg C. Gantt said during a July 25 earnings call with Wall Street analysts, transcribed by Seeking Alpha. https://www.joc.com/trucking-logistics/ltl-trucking-logistics/us-ltl-truckers-battle-profits-not-pallets_20190807.html

Evergreen commits to eleven new 23,000 teu ships

August 14th, 2019 by Sam Chambers, 24/7

The board at Evergreen Marine, Taiwan's largest shipping line, has approved plans to bring in its largest ships, orders that could see the Chang family-controlled line leapfrog Ocean Network Express (ONE) and Hapag-Lloyd into fifth spot in the global liner rankings. Evergreen said it is looking to add eleven 23,000 teu ships, five or six of which it will order and the remainder will be chartered in. The company has set aside $1.76bn for this significant fleet addition.

The new ships will add to Evergreen's existing 1.3m teu fleet. No yards have yet been mentioned although tradition would suggest Japan's Imabari is in poll for a good portion of the new tonnage. As far as Evergreen's existing owned tonnage goes, its largest ships are in the 12,000 teu range, but it also has a slew of much larger ships in the 20,000 teu bracket that have delivered in the last couple of years.

Answers to Trivia

A Nation Awash in Cardboard, but for How Long?

By Jo Craven McGinty, WSJ, Aug. 9, 2019

E-commerce has buoyed the paper industry for years by increasing demand for cardboard boxes. So what happens when online stores decide to cut costs by shipping packages in fewer and smaller containers? In the short term, probably not much. But in the long term, it gets more complicated. At the turn of the millennium, e-commerce accounted for only 1% of retail sales in the U.S. But by last year, together with mail order, it accounted for 17%, excluding cars and gas, according to Fastmarkets RISI, which analyzes the forest-products market and has examined the relationship between online shopping and paper packaging.

As the e-commerce and mail-order sector have grown, cardboard boxes, the most common type of shipping container in the U.S., have hitched a ride. In 2018, about half of all domestic corrugated-box shipments for the retail sector—consuming 40 billion square feet of material—were used for e-commerce and mail-order deliveries, according to Fastmarkets. In the past, some of these boxes would have been diverted to traditional bricks-and-mortar stores, but Fastmarkets attributed at least 80% of the boost in demand to e-commerce and mail-order. In part, that's because online and mail-order outlets use about seven times as many boxes per dollar spent as bricks-and-mortar stores.

Even so, the box industry's profits have grown slowly, perhaps because the majority of the products are generic and generate intense price-based competition, according to IBISWorld, a market-research firm that has analyzed the cardboard-box and container-manufacturing industry. The average profit margin, measured as earnings before interest and taxes, increased from 5% of revenue in 2014 to an estimated 5.8% in 2019—or a total of $3.9 billion out of $67.9 billion in revenues, according to IBISWorld. At the same time, the number of paperboard mills and manufacturers has declined. Nearly 300 mills operated in 2001 with about 41,000 employees, according to the Bureau of Labor Statistics, and more than 3,000 manufacturers operated with 211,000 employees. Now, there are 255 mills with about 31,000 workers and fewer than 2,400 manufacturers with around 150,000 workers.

The American Forest and Paper Association, a national trade organization that represents the paper and wood-products industry, attributes the decreases to streamlining. "The number of facilities has gone down, but the capacity of existing facilities has gone up," said Terry Webber, executive director of packaging at the association. "We're investing in our mills so they have more capacity." The supply of new paperboard, according to figures provided by the Forest and Paper Association, has increased from 46 million tons in 2000 to 47.9 million tons last year. Going forward, the relationship between e-commerce and paper packaging will weaken, Fastmarkets predicts, thanks to the increased use of shipping alternatives such as plastic mailers, efforts to "right size" packages to do away with outsize boxes, and attempts to reduce "overboxing," when a product must be stowed in a second, sturdier container because its original packaging is too flimsy to survive shipping. "We're not worried about it," Mr. Webber said. "We don't know that it's going to have an impact."

Egged on by irritated customers, Amazon.com Inc., the largest online retailer, has branded its plans to reduce packaging waste as a way to eliminate "wrap rage." But cutting down on packaging could also save the company substantial amounts in shipping and transportation costs. Last year, the retail giant spent $27.7 billion on shipping, including transportation, according to its annual report, up from $21.7 billion in 2017 and $16.2 billion in 2016. To help mitigate the cost, the company employs a team of machine-learning experts and physicists to calculate how much material can be removed from standard corrugated boxes without risking shipping mishaps, and its "frustration-free packaging" program requires the packages it dispatches to meet one of three certification tiers, including "ships in its own container."

Since Aug. 1, the company has required items larger than 18 inches by 14 inches by 8 inches or weighing 20 pounds or more to be certified as ready-to-ship without the need for additional packaging. But here's the conundrum: As Amazon seeks to curb its packaging excesses, it also aims to increase its sales. And you know what that means.

More boxes.

FOR IMMEDIATE RELEASE — August 21, 2019

Latest Freight Forecast Projects 25.6% Increase in Tonnage by 2030

Freight and Logistics Revenues to Top $1.6 Trillion Annually in a Decade

Arlington,Virginia — Today, the American Trucking Associations released its latest *ATA Freight Transportation Forecast: 2019 to 2030*, an annual projection of the state of the freight economy, showing continued growth in the industry. "America's trucking industry, and the overall freight transportation industry, are poised to experience strong growth over the next decade as the country's economy and population grow," said ATA Chief Economist Bob Costello. "Our annual Freight Forecast is a valuable look at where we are headed so leaders in business and government can make important decisions about investments and policy."

Among the findings in this year's Forecast:

- **Overall freight tonnage will grow to 20.6 billion tons in 2030, up 25.6% from 2019's projection of 16.4 billion tons.**
- **Freight industry revenues will increase 53.8% to $1.601 trillion over the next decade.**
- **Trucking's share of total freight tonnage will dip to 68.8% in 2030 from 71.1% this year, even as tonnage grows to 14.2 billion tons in 2030 from 11.7 billion tons.**

Trucking and total rail transportation will lose relative marketshare, even as revenues and tonnage grows, while intermodal rail, air and domestic waterborne transportation will show modest growth and pipeline transportation will experience explosive growth – surging 17.1% in tonnage and 8.6% in revenue over the next decade.

"Freight Forecast clearly lays out why meeting challenges like infrastructure and workforce development are so critical to our industry's success," said **ATA President and CEO Chris Spear**. "It belongs on the desk of every decision maker in our industry and in the supply chain."

Shippers experiment with wind, battery power to navigate tough new rules to combat their role in global warming

By Ryan Swift, South China Morning Post, Published: 19 Aug, 2019

- **New rule by the International Maritime Organisation banning high sulphur fuel use by ships has sparked era of huge innovation**
- **Shipping industry must reduce its greenhouse gas emissions by at least 50 per cent by 2050**

Shipping companies in Europe and Japan are looking to their past – the wind and the sun – as they anticipate new regulations designed to reduce greenhouse gas emissions. The shipping industry is estimated to account for 3% of all greenhouse gas emissions. What was once considered a very dirty business is beginning to imagine a much cleaner future. In April 2018, the IMO adopted targets to reduce greenhouse gas emissions in the shipping industry by at least 50 per cent in 2050 compared to 2008. On August 6, Asahi Tanker, Exeno Yamamizu, Mitsui O.S.K. Lines, and Mitsubishi announced the creation of the e5 lab, whose aim is to develop the first zero-emissions tanker ship by 2021, and promote the electrification of the shipping industry in Japan.

Like the auto industry of more than 10 years ago, the shipping industry is now exploring the possibilities of hybrid and all-electric power. On August 1, Norwegian ferry company Color Line launched a 160-metre, plug-in hybrid ship, which can run for at least an hour on its batteries, allowing it to enter and leave port without burning fuel. The American Bureau of Shipping estimates that a ship can use up to 15% of its fuel just entering and leaving port. On July 8, Marfin Management, a ship management company, announced that it had installed a solar-powered hybrid diesel-electric system aboard the 200 metre dry bulk cargo ship Paolo Topic in conjunction with Warsila, a Finnish marine engineering firm. These are the latest in a string of announcements by shipping companies over the past two years to find inventive ways to cut carbon emissions, including using the latest ideas in wind power.

In 2018, Japanese shipping giant K Line announced an agreement to test a kitesail by Airsea, a spinoff company from aviation giant Airbus. The kitesail deploys automatically from a mast at the front of the ship and according to Airsea CEO Vincent Bernatet, it can cut fuel consumption, and thus emissions, by as much as 20 per cent. Airbus uses giant "roro" ships – Roll on, Roll off – to transport parts of its airliners between production locations, and Airbus has said it will use kitesails by Airsea on these ships. The first K Line ship to deploy an Airsea kitesail in 2021 will either be a Capesize or Panamax sized dry bulker, according to Koji Tsumuraya of K Line's Advanced Technology Group. K Line, which operates a fleet of 520 ships, has promised to buy 50 more kitesails from Airsea after seeing the results of the first kitesail test.

Norsepower, a Norwegian company, partnered with Maersk Tankers on a Flettner wind cylinder, a tower that rapidly rotates in the wind, generating thrust. The tanker Maersk Pelican is currently testing two, 30-metre Flettner Rotors, installed in August 2018, with the aim of reducing fuel consumption by up to 10 per cent. The results are to be verified this year. In 2018, Maersk, the world's largest shipping company, announced its intention to be carbon-free by 2050. Given the 20-year lifespan of cargo ships, achieving this goal would mean commercialising carbon-neutral ships by 2030.

Last year, Japanese shipping company MOL partnered with Oshima shipbuilding and the University of Tokyo to build a vessel with a rigid sail placed at the bow of the boat, which is expected to reduce emissions by up to 10%. The ship and sail is to be operational in 2022, according to Hidetoshi Fukushima of MOL's technical division. In November 2018, China Merchants Energy Shipping, one of the world's largest operators of tanker ships, and Dalian Shipbuilding Industry Group launched the 333-metre oil tanker New Vitality, equipped with twin wingfoil sails. Hydrogen fuel cells have also been proposed as a zero-carbon alternative. In May, Hyundai Motors announced that it would develop a hydrogen fuel cell cargo ship, to be ready for 2022. That month, Swedish engineering giant ABB announced that it would supply the hydrogen fuel cells for a new river cargo boat in France, due to launch in 2021.

The new urgency to find climate-friendly solutions for the shipping industry comes amid a tough clampdown on sulphur emissions by the International Maritime Organisation (IMO). On January 1, 2020, the world's shipping companies will have to switch to low sulphur fuels or invest in scrubbers that remove sulphur content from a ship's exhaust, thanks to new regulations by the IMO. It's one of the first concrete steps towards reducing pollution and emissions from the shipping industry. "This is the biggest fuel change that has ever been attempted overnight for the shipping industry," said Martin Cresswell, technical director for the Hong Kong Ship Owners Association. "There are many unknowns, but with them comes opportunity as well for players ahead of the game." Cresswell said the current 3.5 per cent sulphur-heavy residual fuels currently used by the world's fleet of around 70,000 cargo ships are waste products from the refining process. "It is very low end fuel that is not far removed from tar that is used on the roads."

Cresswell said that the new low sulphur hybrid fuels will have many varied characteristics, depending on where they are produced, and most will be incompatible with each other, adding to shippers' headaches.

Andy Dacy, global head of transportation for JP Morgan Group, which manages US$2 billion in transportation assets, said that the shipping industry is still very fragmented, and will have about a year of "teething issues" with the new low sulphur rules. The uncertainty about low sulphur fuel, the debate about new fuels and the focus on energy efficiency by investors, may ultimately force smaller companies from the market altogether, Dacy said. Dacy said that common view is that LNG will be the new fuel for shipping. The American Bureau of Shipping (ABS) reported in 2019 that it has taken 10 years for LNG fuelling infrastructure to develop to supply less than one per cent of the global cargo fleet, adding that there is "no obvious fuel choice for the global fleet of the future."

Bernatet of AirSea said that building a ship now is as much about what regulations will be in 20 years as now. He added that IMO objectives include a 40 per cent emissions cut by 2030. "From an investment point of view, 2030 is tomorrow. Decisions need to be taken now." But such decisions could be tricky. "There is real momentum behind achieving a zero carbon future but it is still some way off – at the end of the day, somebody has to pay for it and it is simply not possible to take this great technological leap forward on the earnings shipowners have been making over the past few years," said Tim Huxley of Mandarin Shipping, a Hong Kong based shipping company.

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Peter Friedmann's View from Washington DC – August 2019

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The August recess is usually when things slow down here in Washington DC. It's been over a month of hot and humid weather. Congress has produced precious little (but they passed a budget, so they and the President could continue to spend money at record pace). Everyone is ready to leave. But this year seems different. Instead of slowing down, it seems that things are accelerating. Gun rampages seem to be more frequent, and more deadly. Every few days there's another place in this country where politicians make brave statements about how the madness must cease. In the Straits of Hormuz, Iran is attacking oil tankers - chafing under sanctions imposed by the US and allies to curtail that country's nuclear program and funding of terrorism.

The US-China trade dispute has done nothing but accelerate, with both sides rapidly approaching the bottom of their bags of trade weapons. Tariffs have been imposed now on most of what we import from China, (with a few exclusions). And China has reciprocated on our exports. We're not done; the latest "List 4" imposing 10% tariffs on all consumer goods, such as telephones, electronics, televisions, footwear, apparel, will be effective in just 3 weeks. As if agriculture and forest products exporters needed any more evidence of the downward spiral of this trade dispute, each side continues to ratchet it up. Over a year ago, China's first retaliatory target was US ag exports. Then negotiations continued, and China promised to buy a lot of soybeans. Then President Trump announced billions of dollars of purchases of ag from US producers who had lost sales in China. Then China reneged. Then USDA Secretary Sonny Perdue announced another round of purchases. Then the President announces more tariffs (List 4) finally tariffing all remaining imports from China. China retaliates by promising to ban imports of US ag. The President declares China to be a Currency Manipulator. What's next? Countries try to manipulate the value of their currency downward in order to make their exports more affordable (and it makes imports more expensive). The trouble is, that the typical enforcement tool against a "Currency Manipulator" is to impose punitive tariffs, but that is difficult to do when we already have imposed tariffs across the board. The only weapon left is to increase existing tariffs further; the imports that are now subject to 10% tariffs are candidates for further tariff increases.

How long will the trade war last? Good question, particularly since the President seems to be supported, or at least not opposed, by most Members of Congress, both Republican and Democrat. In fact, shortly before the President declared China to be a currency manipulator, the Senate Democratic Leader urged the President to do so. Overall, Democrats and Republicans continue to support a tough position versus China to address intellectual property theft, cyber security and hacking, counterfeiting, technology transfer. Meanwhile Wall Street gyrates violently.

One area that does seem, ironically, to be quieting down is the southern border. Just two months ago Customs and Border Protection was forced to redeploy its inspectors and other personnel from airports and seaports around the country, to assist with the deluge of immigrants and cargo. Members of Congress were concerned that cargo flows through their constituent international trade gateways would slow. But this week CBP has announced that those individuals have been returned to their posts, suggesting that things are indeed settling down, at least for now, on the southern border. Thankfully…but we are nervous, what's next on that border?

Now, the 2020 Presidential campaign has begun; debates underway. Each candidate must strive, every day, to stand out from the crowd, to do and say whatever it takes to garner attention, media coverage. The media amplifies everything they say -- the good, the bad, the ugly. The noise is getting louder.

No, this is not the August recess we used to look forward to.

7 Advantages to Outsource Inc

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3. Drive Efficiency and Cost Savings
4. Improve Risk Management
5. Acquire Custom Solutions
6. Develop Internal Staff
7. Improve Customer Satisfaction