PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
PROVIDENCE, RI
PERMIT # 558

American Journal of Transportation
116 Court Street, Suite 5, Plymouth, MA 02360

AJOT

Stay informed at
www.AJOT.com
and on Social Media!

AJOT.COM | OCTOBER 9 - 22, 2017 | ISSUE #658

New York Ports

page 2

Port of NY & NJ's big-ship-serving gateway on record pace, delivering for region, nation

page 2

Big ship jitters voiced at Port Industry Days

page 9

Latin American Trade

page 10

Mexico and Trump trade policies: it's complicated

page 10

US trade deficit with Mexico: More than meets the eye

page 12

North American Auto Logistics

page 14

Vehicle exports are climbing, but will they offset slowing imports

page 14

Featured in the AJOT's next edition:
Temperature-Control Logistics
Mediterranean/Middle East/Africa Trade

Port of NY & NJ's big-ship-serving gateway on record pace, delivering for region, nation

By Paul Scott Abbott, AJOT

The longtime busiest containerport on North America's Atlantic Coast, the Port of New York and New Jersey is on a record pace this year and, with major enhancements recently completed and collaboratively in the works, is poised to deliver as the U.S. East Coast gateway of choice for decades to come.

Molly Campbell, director of the Port of New York and New Jersey, and Sam Ruda, the port's deputy director, in sharing enthusiasm in a late September interview with *AJOT*, pointed to the raising of the Bayonne Bridge roadbed plus the deepening of harbor areas to 50 feet as key recent developments, while a new master plan bodes to chart the future course.

"I really can't complain as to where we are today," said Campbell, formerly deputy executive director of the Port of Los Angeles, now in her third year at the helm at the Port of New York and New Jersey. "As I sit here today, we're looking at record volumes coming through the port. A lot of it has to do with the economy doing well. But it also has to do with the strength of this gateway.

Molly Campbell is pleased with progress at the Port of New York and New Jersey since she came aboard as director in July 2015.

"If anything, this gateway has grown in terms of its strength and its attraction to the supply chain and to business," Campbell continued, "so it's an exciting place to be. And I think we have more upside as a result.

"So, as we tackle one thing, where we complete the channel deepening, we complete the raising of the roadway, we are working on infrastructure improvements in terms of moving the cargo," she said, "I think for the future, as we're thoroughly in a growth mode, we need to think through what we can and should do to continue to make sure, even in more challenging times, that this port is doing what it can to continue to attract cargo.

"I'm excited about the future and what it holds," Campbell said. "One of the things I love about this organization and this port complex is all of the partners work well together in trying to figure out the solutions, and that's been very positive."

The $1.6 billion 50-foot-harbor project was completed in late summer 2016 in conjunction with the U.S. Army Corps of Engineers, while the $1.3 billion raising of the Bayonne Bridge clearance was celebrated about a year later, on Sept. 7, as CMA CGM's *T. Roosevelt*, with a capacity of 14,414 twenty-foot-equivalent units, passed beneath.

In August, the Port of New York and New Jersey set an all-time monthly record for containerized cargo volume, with 631,404 TEUs handled, soaring past the previous record month total of 588,918 TEUs logged in July 2015.

Through August, the port has seen more than 4.4 million TEUs of containerized cargo move across its

(PACE – continued on page 4)

Indicative of the Port of New York and New Jersey's strength beyond the containerized cargo sector, automobiles are offloaded from a roll-on/roll-off vessel at Port Newark in New Jersey.

*(**PACE** – continued from page 2)*

docks in the current calendar year, not only 6.7 percent ahead of the total at the similar juncture a year earlier but, with four months to go, also on pace to eclipse the annual record to date of nearly 6.4 million TEUs set in 2015. The only busier U.S. containerports are the Southern California gateways of Los Angeles and Long Beach, respectively handling more than 8.8 million TEUs and almost 6.8 million TEUs in 2016.

Campbell pointed out that, with the raised Bayonne Bridge roadbed, the New York-New Jersey port now can handle containerships with a capacity of as many as 18,000 twenty-foot-equivalent units, including those coming via the Suez Canal, in addition to those in the 14,000-TEU range transiting the expanded Panama Canal.

Indeed, according to Campbell, that translates to gains for major containerports all along the U.S. East Coast.

"The ships have two routes by which to transit here," she said, "and I quite frankly think that the rest of our port community that shares the supply chain route from the Panama Canal to the southern ports – Norfolk, Savannah and Charleston – also benefit. The region as a whole and the country as a whole, I think, benefit from this project being completed."

Another bridge project – to replace the Goethals Bridge that spans the Arthur Kill just below the GCT New York container terminal at Howland Hook on Staten Island – is part of the port's current $4 billion-plus capital program. That bridge endeavor is projected for completion in 2019.

Hard and soft infrastructure enhancements by both public and private sectors are advancing the Port of New York and New Jersey, according to Campbell.

For example, the Port Newark Container Terminal and APM Terminals' facility in Elizabeth, New Jersey, are heavily investing in improvements to gate complexes and wharf infrastructure, including more and larger cranes, to better handle the big volumes of boxes coming off the megacontainerships.

"More of a soft thing is making sure we're more responsive to the needs of the trucking community," she said, noting that GCT Bayonne, in Jersey City, has been very successful in improving turn times with its pilot of a truck appointment system. "Our hope is that, as they complete their pilot, other terminals will also pick that up."

Campbell said truckers typically are getting in and out of the terminal within 45 minutes and are now often able to complete three or four turns per day compared with one or two in the recent past.

Ruda interjected that he anticipates that truck appointment systems are likely to soon be introduced as well at facilities such as Port Newark and APM Terminals Elizabeth in conjunction with gate complex reconfigurations.

Rail enhancements are under way, too, including moving forward toward projected mid-2018 completion, in collaboration with GCT USA, of an ExpressRail intermodal container transfer facility adjacent to GCT Bayonne. The ICTF augurs to further efficient links with inland destinations via Norfolk Southern and CSX trains.

Future undertakings are expected to be outlined in the comprehensive master plan upon which Hatch Associates Consultants Inc. embarked in fall 2016.

"It's exciting," Campbell said of the master plan, which is expected to be completed in early 2018. "I think we have an opportunity to really look to our future and figure out how we want to set it out."

Ruda noted that the plan is taking a 30-year view related to the more than 3,000 acres of cargo facilities under the port's jurisdiction.

"We're starting to really get into the meat of the plan," he said, "looking at a number of scenarios, land

*(**PACE** – continued on page 8)*

CMA CGM's *T. Roosevelt*, with a capacity of 14,414 twenty-foot-equivalent units, becomes the largest cargo vessel to call the Port of New York and New Jersey, passing under the raised Bayonne Bridge roadbed Sept. 7 on its way to the Elizabeth-Port Authority Marine Terminal in New Jersey.

Sam Ruda, deputy director of the Port of New York and New Jersey, sees the port's master plan charting a course for the next 30 years.

Logistics of trash - New York State of mind

The City of New York has a lot of trash – an estimated 12,000 tons a day. With no City landfills or incinerators, it all has to be transported out of town. Moving the vast amounts of waste through the city's crowded streets is time consuming and costly. In 2016, the city adopted a new plan with a logistics twist to handle the daily challenge of trash.

By Marty Pilsch, AJOT

As people wind their way from turnpikes to highways and across bridges to local streets on their travels to various sections of the City of New York, nonnatives, or those with less experience, must wonder how anything gets done? The volume of traffic existing at almost any time of the day, envelopes you, often times overwhelmingly so. One can only imagine how New Yorkers feel as they make their way on daily errands or to work, or recreation, and back. Eventually, you realize that you must persevere as they do.

New York is reportedly the third most densely populated city in the world. With an area of 302.6 square miles and a population of over 8.5 million, New York's density is calculated to be more than 28,000 people per square mile. This level, if even closely relating to reality, can create staggering logistics problems for the people who live there as well as those supporting them. Moving goods to and from the city can be a challenge.

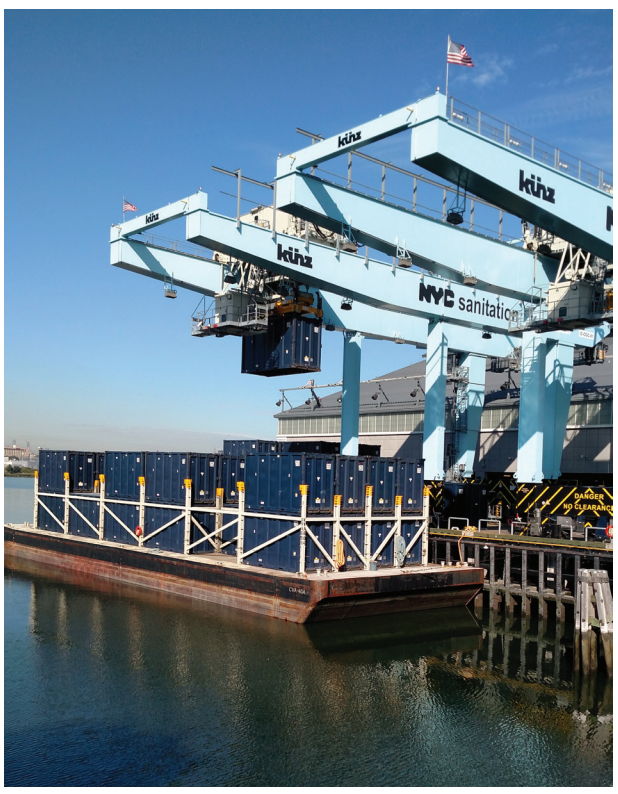
Containerization of Trash

Mayor Michael Bloomberg's administration has taken a new approach to handling the logistics of the City's trash. In 2016 the City inked a plan under which four new marine waste transfer stations would be built and five rail stations activated to move nearly all the city's residential and more of the commercial garbage by rail or barge. The result tractor-trailer trucks and sanitation vehicles will travel six million less miles.

Population density of this magnitude can also have a profound impact on City public services. As a result, segments of the intermodal cargo transportation industry have become involved, working with the City to relieve one of the most critical pressures, public sanitation, specifically the collection of garbage.

Last the Bloomberg administration unveiled a Department of Sanitation (DSNY) "2016 Strategic Plan" which outlined 12 goals and 46 strategies for handling waste. A cornerstone of the new DSNY blueprint was adopting a "logistics" approach to the process.

A review of the City's Department of Sanitation, the DSNY, indicates that it operates 59 district sanitation areas. To accomplish this, they employ approximately 7,300 workers. The DSNY dispatches over 2,200 collection trucks along with collection teams that provide regularly scheduled curbside recycling and garbage/trash collection from households, public schools, and certain non-profit organizations. In addition, numerous businesses including hotels and restaurants and some of the busiest international airports and marine terminals contract with private operators to handle their collections.



Kunz cranes work the barges, cycling containers on and off.

The collection and disposition of trash is a critical element of the daily mission of both the City and its business community. When fully operational the containerization program from the trash collection sites is said to include up to 48,000 containers, approximately 19,200,000 lbs of trash per year. The complexity of this immense effort has created a unique cooperation between New York City's Sanitation Department, entities of the Port of New York/New Jersey and a network including intra-port water transportation resources and cargo handling equipment experts.

The development of this cooperation has been ongoing over a four-year period and will continue for a period of time until the completion of all of the four trash collection sites being constructed by DSNY. City staff and consulting teams including equipment experts, have collaborated to create the design of high tech, multi-stage trash collection facilities at four waterfront locations around the city.

The system that has been devised as a four-part cooperation:

1. A combination of the local collection system at

*(**TRASH** – continued on page 9)*


Containers fully loaded receiving auto locking lids

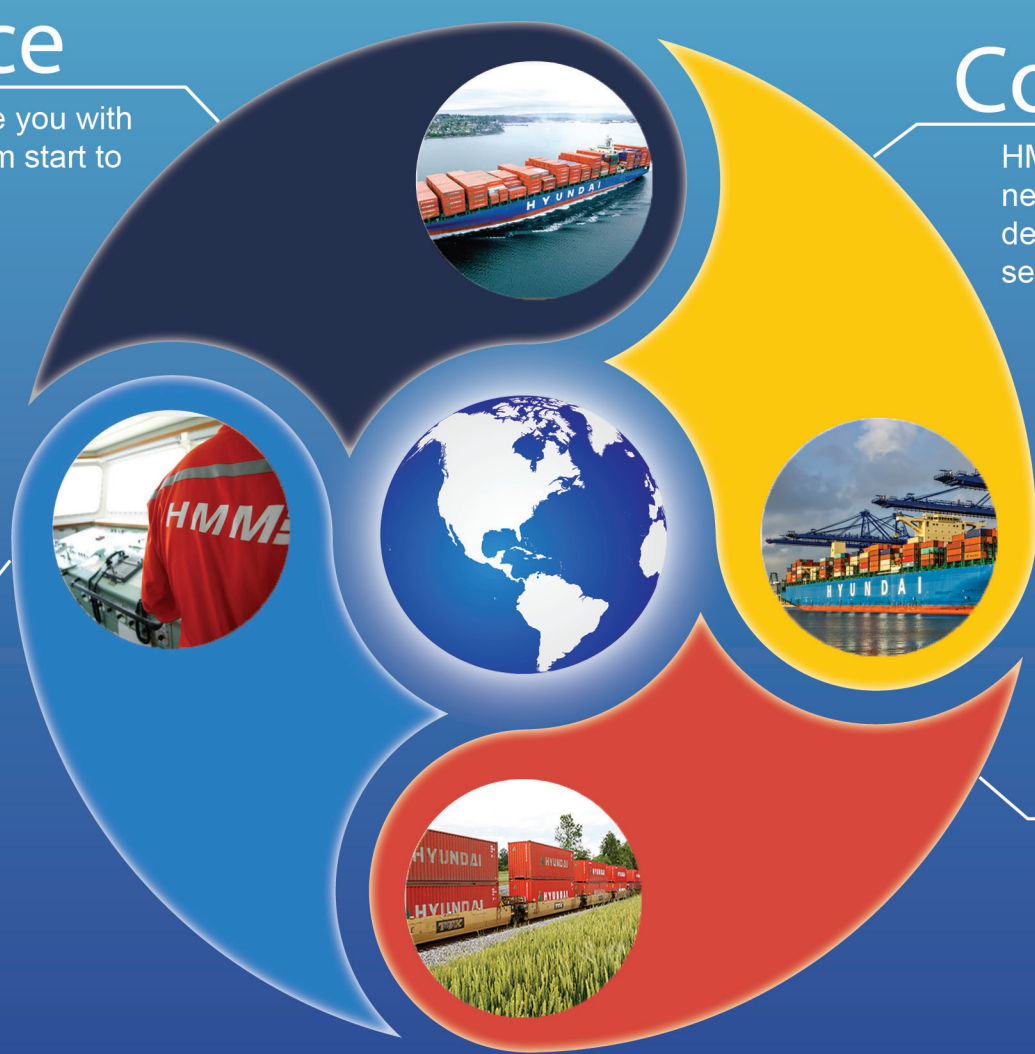
BETTER FASTER STRONGER

Excellence

Our main goal is to provide you with operational excellence from start to finish.

Commitment

HMM is proactive in meeting customer needs. Our industry professionals are dedicated to pursuing innovation and service expansion.



Reliability

At HMM, we make it our mission to deliver your cargo on time, every time.

Growth

In 2017, HMM has partnered with the 2M Alliance to expand our service product and boost our competitiveness.

www.hmm21.com

@HMMAMERICA

WE CARRY THE FUTURE

HMM

1-877-7HYUNDAI

Port of NY/NJ benefits from the past, looks forward to the future

Port Industry Day for the Port of New York/New Jersey highlights how decisions made 20 years ago enable the port to handle today's mega ships. And now port leadership is looking at the next 30 years.

By Peter Buxbaum, AJOT

The raising of the Bayonne Bridge at the port of New York and New Jersey port has been years if not decades in the planning—as is the case with many port infrastructure improvements—but the completion of the project in this case delivered almost immediate results.

The $1.6 billion raising was completed on June 8, 2017 and within days the port began seeing vessels of 10,000 TEU and up calling on the port. Before the raising, the largest ship to sail under the bridge was 9,400 TEU. Three short months after the Bayonne Bridge's June completion, on September 7, the CMA CGM Theodore Roosevelt, a 14,414-TEU vessel, called on the port of New York and New Jersey.

A side effect of such rapid results is to make stakeholders nervous that the port may not yet be prepared to handle the spikes in volume delivered by the super ships. This, despite the fact that the port of New York and New Jersey—along with its peers elsewhere around the country, and together with the Federal Maritime Commission and the United States Department of Transportation, among others—have been working assiduously to improve systems, implement technologies, and invest in infrastructures which would improve port throughput. A representative sample of those stakeholders expressed their concerns at the 17th annual NYNJ Port Industry Day which took place October 2, 2017 in Jersey City, N.J. *(See sidebar on page 9)*

Bridgework

As ships grew in volume over the years the air draft under the Bayonne Bridge, where vessels transit on their way to the Newark Bay ports of Newark and Elizabeth, became problematic as masts and antennas began scraping the bottom of the bridge. The Bayonne Bridge project, which was funded exclusively with Port Authority funds, was three years in the planning and four in the building. And, by the way, it's not done yet, noted Bethann Rooney, assistant director of the Port Commerce Department of the Port Authority of New York and New Jersey.

*(**BENEFITS** – continued on page 21)*

*(**PACE** – continued from page 4)*

use scenarios, highest-and-best-use scenarios, but also evaluating long-term growth in capacity and what that means in terms of decisions and the planning now and over time."

Both Campbell and Ruda cited the importance of the bistate landlord port's substantial stakeholder outreach and engagement in the plan's development.

"This has really been a broad outreach in terms of the stakeholder input and collaboration, doing a tremendous amount of listening," Campbell said. "I think the success of the plan really is determined quite frankly by people at least feeling heard and, as we carve it out, to incorporate some of their feedback."

The port's development continues to center around four strategic pillars of increasing productivity, improving infrastructure, enhancing revenues and doing so in a sustainable way.

"Those are all goals that are completely applicable today," Campbell said. "The challenge is doing so in a manner that is sustainable or green, and I think that there we need to do a little bit more. One of the things we're looking at is the success in terms of our Clean Air Action Plan and what we have done and what more we could and should and can do."

Port staff, she said, is taking a closer look at a number of environmental initiatives, from the clean trucks program to vessel- and cargo-handling equipment to potentially providing shoreside power for berthed cargo vessels (in addition to such plug-in capability now available at the Brooklyn Cruise Terminal).

"The increasing productivity is absolutely necessary for this gateway," Campbell added, citing collaboration with stakeholder partners in efforts such as the truck appointment systems and infrastructure advances.

"Quite frankly, if we're doing those things well," she said, "we should be enhancing our revenues and our volumes, because then the cargo has every reason to flow here."

Ruda said that, while the container side tends to capture the headlines, the Port of New York and New Jersey is enjoying cruise growth and realizing strong volumes in vehicles handled.

Through August, the number of automobiles handled at Port of New York and New Jersey terminals was up nearly 12 percent on a year-over-year basis compared with calendar 2016.

"One of my observations when we were out on the water for the *Teddy Roosevelt* celebration was just looking in awe at the harbor and all the maritime activity," Ruda said. "It is a busy, busy port."

Campbell added, "Everyone plays a role, and we couldn't do all of this without all of our port partners, and I know I'm going to miss someone, but our terminal operators, the labor, the truckers, the carriers, the people who inspect our cargo and support the growth of our facilities. Not one group can do it without the other to make the port successful."

(*TRASH – continued from page 6*)
residences and business sites using up 2,230 trucks.
2. The creation of automated trash handling systems at four major collection sites.
3. Development of an intra-port water transportation system from the collection sites to an intermodal interchange at one of New York's most active marine terminals, NYCT. (New York Container Terminal).
4. The use of NYCT's container handling and inland rail transportation connection for inland disposition.

DSNY Collection Sites

Two of the DSNY collection sites have been in full operation, two are under construction. The system that has been developed includes a relatively straight forward flow of the trash received. Much of the equipment that is now employed, however, is high tech and extremely effective.

AJOT in the company of representatives of the manufacturers supplying the heavy equipment to the DSNY visited one of the active sites. A supervisor for Covanta, a contracted management entity, is on site at all times.

Trash continues to be collected at the source (residential and business) as usual and carried to the new facility. The trucks are weighed in and proceed to the internal dump site, an overhead platform about 15' above the main trash receiving hall. As the trash is dumped from the trucks to the floor below, large front-end loaders work to distribute it into piles for movement to prepositioned containers located about fifteen feet below the receiving hall. Front-end loaders dump the trash into open top 12x20'x8' steel containers specially designed for this use. A combination of automated tamping, front end loaders and a rubber tired bucket crane continuously compact the trash in the containers.

Eventually, with hopefully the maximum capacity achieved, one last effort is made to tamp down the trash with an automated tamping device, before the container is automatically sealed. Once the containers are loaded and lids locked, they are automatically moved to the outside of the buildings where they are positioned under the cranes.

The container moving, tamping and locking design is provided by Accurate, owned by Waste Quip. Once the container is sealed by the Lidder, they are air and water tight. When the containers are returned to the site, Lidder unlocks the lid and holds it for the next placement. The four corner castings have openings to facilitate the cranes lifting each container through the 90-degree rotation of the spreaders twist lock mechanism. The unique rear door design of the containers utilizes an automatic locking mechanism which affords dumping of the containers with the truck operator remaining in the cab of the vehicle.

The dockside designs will be similar at each of the four facilities. They can receive up to two barges at a time.

All of the cranes, were part of a competitive bid process with the DSNY. They are contracted by Mi-Jack Products, a privately owned company whose headquarters and manufacturing are in a Southside suburb of Chicago since 1955. The company specializes in heavy lift equipment for the transportation industry. The cranes are being produced by Austrian manufacturer Kunz. The cranes were fabricated, delivered, erected and will be supported by the Austrian crane company. Eight cranes have been ordered, and six have been delivered. The cranes will be capable of lifting 30 ton containers with a maximum lift height of up to 50 feet.

In the Port of New York, New York Container Terminal, NYCT, will handle trash container barges from Queens and Manhattan collection centers. NYCT has installed two Konecranes for this work. With this approach, each facility is designed to handle up to three barges per day and the empty containers returning can be placed in position to be reloaded.

Kunz is a privately-owned company founded in 1932. Kunz America, Inc. is located in Raleigh, North Carolina with responsibility for sales, installation and service. In North America, Kunz is recognized for its attention to detail and robust overhead bridge crane design. Kunz has product located in ports and intermodal terminals throughout the world.

Kunz will be installing two new cranes across the river from NYCT at the still developing Elizabeth trash container site that will handle containers from two Brooklyn collection sites.

Big ship jitters voiced at Port Industry Days

By Peter Buxbaum, AJOT

The era of the big ship has taken the port of New York and New Jersey by storm, leaving port stakeholders nervous about the port's capabilities to handle the levels of cargo carried by the new mega vessels. The completion of the raising of the Bayonne Bridge roadbed in June had the immediate effect of attracting a new generation of giant containerships to the port, with the prospect of increasing cargo volumes but also port congestion. *(See main story on page 8)*

According to a panel speaking to the NY/NJ Port Industry Day Oct. 2, 2017, the key to solving, or at least coping with the issues now facing the port, thanks to the big ships calling there, are coordination, cooperation, collaboration, and teamwork. The Port of Authority of New York and New Jersey has endeavored to facilitate those values with platforms, such as the Council for Port Performance, that bring port stakeholders together for discussion and brainstorming.

Drayage and driver issues, as well as gate and terminal operations, dominated during the panel discussion.

"We must not lose sight that the basic essential component are the truckers themselves," said Jeffrey Bader, president of the Association of Bi-State Motor Carriers. "The number of drivers willing to service containers continues to dwindle. We must prioritize reducing the time for pick-ups and drop offs."

The port has yet to address the gate-hours situation, according to Bader. "We need longer gate hours and make them consistent from terminal and terminal, as they are at other

(*JITTERS – continued on page 20*)

Mexico and Trump trade policies: it's complicated

A faltering NAFTA could increase U.S. trade deficit and have other side effects.

By Peter Buxbaum, AJOT

Mexico's position among Latin American economies is particularly sensitive to Trump administration trade policies because of its high level of trade exposure to the United States and because of President Donald Trump's obsession with redressing trade deficits. But if Trump makes good on his threats to terminate NAFTA, or should the renegotiation talks falter, the likely result will be counterproductive to Trump's aims. That's because the Mexican peso will fall, by as much as 25%, according to some estimates, making Mexican products cheaper in the US and increasing the deficit.

To be fair, the demise of NAFTA would represent a multi-faceted problem for all concerned. A falling peso could encourage Mexican imports and U.S. investments in Mexican manufacturing but it could also increase costs to Mexican manufacturers in some areas, such as the price of U.S. natural gas.

The global credit insurer Coface recently released a report outlining possible outcomes of U.S. trade policies for Latin America. Costa Rica, El Salvador, and Honduras are all vulnerable to any eventual import measures imposed by the United States. But Mexico's position is particularly sensitive because of the Trump administration's articulated policy to focus on countries with a strong trade surplus with the U.S.

It's questionable, to say the least, whether U.S. trade policy should be based on the extent of the deficit with any given trading partner. In the case of Mexico, the trade deficit picture is far more complicated than it is being portrayed by some politicians. *(See story on page 12.)*

Peso Fallout

According to the Peterson Institute for International Economics, if NAFTA was to come to an end, the Mexican peso would devalue by more than 25%. Mexican-produced cars would be likely to become more competitive in the United States, which would further add to the trade deficit in contrast to what the administration is trying to achieve.

Despite Trump's threat, as recently as August 28, that he would likely terminate NAFTA, currency markets are assuming smooth sailing toward a renegotiated NAFTA at the moment. But it wasn't always so. When Trump won the election, the peso sank more than 10%. In January, amid talk of a possible US withdrawal from NAFTA, the peso dipped five percent. Rumors in April that Trump was about to sign an executive order to withdraw led to another five-percent drop.

The currency markets are currently quiescent, but Caroline Freund, who wrote the Peterson report, warns that "the renegotiation talks could still get derailed." "And what we have learned from these past experiences," she added, "is that if NAFTA is scrapped the peso will plunge."

If Trump's problem with NAFTA is the growing trade deficit with Mexico, then talk of withdrawing from the agreement and slapping tariffs on Mexican imports would be counterproductive, *(**POLICIES** – continued on page 12)*

Caroline Freund – Peterson Institute for International Economics

US trade deficit with Mexico: More than meets the eye

By Peter Buxbaum, AJOT

The United States-Mexico relationship has been rocked since Donald Trump became president, first over the issue of the border wall and then over issues of trade.

Mexican President Enrique Pena Nieto canceled a meeting in Washington with President Donald Trump early on in the administration because he refused to discuss paying for a border wall between the two countries. Later, the two leaders later had what was described as a friendly discussion, but Trump on the very same day doubled down on his attacks against the imbalance in US-Mexico trade.

"Mexico has taken advantage of the US for long enough," the president tweeted. "Massive trade deficits & little help on the very weak border, must change, NOW!"

U.S. Trade Representative Robert Lighthizer has made it clear that administration policy is to go after bilateral trade deficits and that deficit reduction is a major U.S. goal in the NAFTA renegotiation. Lighthizer recently told a Washington think tank audience that trade deficits are a symptom of a lack of fairness in trading rules.


US Trade Representative Robert Lighthizer

"It's reasonable to ask," he said, "whether what we pay and what we receive in these agreements are roughly equivalent." Lighthizer reiterated that position at the close of the third round of NAFTA talks on September 27 when he said, "We continue to push for ways that will reduce the U.S. trade deficit."

Trading Services

Drilling down into the numbers shows that U.S. trade with Mexico is not as lopsided as Trump would have people believe. Bilateral trade in goods and services was estimated at $579.7 billion in 2016, according to numbers released by the United States Trade Representative. Of that, total US exports to Mexico totaled to $262.0 billion, while Mexican imports to the United States were $317.6 billion—leaving the US with a $55.6 billion overall trade deficit.

But in the category of services, the U.S. ran a surplus. Trade in services between the two countries was $54.5 billion in 2016, with the U.S. exporting $31.1 billion in services and taking in $23.5 billion from Mexico, for a U.S. surplus of $7.6 billion.

Mexico is the second largest export market for the U.S., supporting 1.2 million jobs in the U.S., according to the Department of Commerce, and its third largest overall trading partner. Since signing NAFTA in 1994, U.S. exports to Mexico have increased 468%, accounting for nearly 16% of all U.S. exports.

Besides, the numbers don't necessarily tell the entire story. In the case of auto parts, the US imported $340 billion over a five-year period, but, of that, $136 billion were exported back to Mexico, where they were used to manufacture cars that are sold back to the U.S.

Since the advent of NAFTA, U.S. automakers have created a continental supply chain, with Canada and Mexico providing parts and some assembly, a fact that has become important to the competitiveness of the U.S. auto industry.

According to a report released last year by the Center for Automotive Research (CAR), "It is...highly likely that the automotive firms in the United States and Canada are part of a supply chain that includes Mexico as either a source of inputs, destination of their output, or both."

Also, key to a competitive North American auto industry is the growing population of skilled labor that Mexico offers. While the extreme differential in labor costs may not last forever—automotive assembly compensation is currently 80 percent lower in Mexico than in the U.S., according to CAR—wages aren't the only factor that attracts manufacturing investments to Mexico.

"Mexico offers workforce development and training programs and other aggressive development incentives," noted the CAR report, including "multiple coordinated strategies" at the federal level, a factor that sets it apart from its neighbor to the north.

American Journal of Transportation
is published by Fleur de Lis Publishing, Inc.
No responsibility is assumed for unsolicited manuscripts.
Subscriptions:
Domestic $199.00
Canadian $287.00
International $448.00
phone: 508-927-4188; fax: 508-927-4189

George Lauriat ..... Editor-in-Chief
Robert Kirk ..... Managing Editor/ Print Production
Eric Nelson ..... Web Manager/ Ad Design
Carole Lauriat ..... Office & Circulation Manager
Peter Buxbaum ..... Northeast Correspondent
Paul Scott Abbott ..... Gulf region Correspondent
Stas Margaronis ..... California Correspondent
Leo Quigley ..... Pacific Northwest Correspondent
Leo Ryan ..... Canada Correspondent
Matt Miller ..... Business Correspondent
Manik Mehta ..... International Correspondent
Robert Wallack ..... International Correspondent

William Bourbon ..... Publisher

Dave Cantwell ..... Southeast & Gulf Coast Sales Rep
phone: 954-328-9335 ..... email: dcantwell@ajot.com

Brendan Dugan ..... East Coast & West Coast Sales Rep
phone: (908)499-8737 ..... email: bdugan@ajot.com

Ed Andrews ..... Europe Sales Rep
phone: +44 7880 702227 ..... email: ed@duvelmedia.com

*(**POLICIES** – continued from page 10)*

according to Freund. That's because, the more the peso falls, the cheaper and more competitive Mexican imports become, yielding an even higher trade deficit. A U.S. withdrawal from NAFTA, in other words, would, in Freund's words, "very likely expand in the absence of NAFTA."

So could U.S. investments in Mexican manufacturing capacity, a phenomenon that has aroused the presidential ire. But manufacturing costs in Mexico is a multi-edged sword, and the demise of NAFTA could wreak havoc on Mexican manufacturing, U.S. importing, and Mexican emigration, another touchy subject.

The benefits of a peso devaluation don't extend to every area of a manufacturer's business, according to a recently-released report from Entrada Group. Mexico's competitive advantage predominates in labor costs, especially as the peso devaluation's side effect includes an appreciation of the Chinese RMB, which increases labor costs in that country.

On the other hand, costs such as construction, utilities, and telecommunications, the Entrada report points out, "are often at a premium in Mexico because such infrastructure elements are financed in U.S. dollars." As an emerging market, Mexico's costs to finance in dollars is much higher than it in developed areas like the United States or Europe. "It's important for manufacturers contemplating a Mexico footprint to look beyond the workforce," says the report, and consider all the costs they will incur.

Wild Card

Another wild card is the easy export of U.S. natural gas to Mexico. Mexican manufacturers have come to rely on imports of cheap U.S. natural gas to fuel their growth, noted Jason Bordoff, a former energy adviser to President Obama, in a paper published by the Center on Global Energy Policy at Columbia University. Under NAFTA, Mexico receives gas as a "free trade country," which reduces the regulatory requirements for exports. Should that situation end, exporting U.S. natural gas to Mexico will be accompanied by a more heavier regulatory burden and, therefore, become more expensive, increasing costs to

*(**POLICIES** – continued on page 16)*


Jason Bordoff, energy advisor

NOW SHIPPING CROSS-BORDER IS AS EASY AS SHIPPING CROSS-TOWN.

BNSF Railway and our carrier partners offer seamless intermodal service 5 days a week between major markets in the U.S. and Mexico. This 100% steelwheel service connects shippers in the U.S. and the fastest growing markets in Mexico, including Monterrey, San Luis Potosi, Silao and Toluca. With streamlined border crossings, it's the fast, efficient and low-cost alternative to congested highways and customs processing.

17BNSF-CP11728

To learn more about our latest service, visit BNSF-KCS.com.

BNSF RAILWAY

Vehicle exports are climbing, but will they offset slowing imports

Vehicle exports from the U.S. have come as a pleasant boost for American ports. The question is whether a boost in exports will offset declining auto import volumes?

By Matt Miller, AJOT

Last year, the Port of Portland, Oregon notched a double-digit gain in the number of finished vehicles it handled. The real —and unlikely -- star for this Pacific Rim port: Exports.

"What's really helped us was the demand from China for high-end American vehicles, Mustangs, Expeditions, Lincoln Navigators," explained Ken O'Hollaren, the port's marine marketing manager. "It's a reflection of China's economic growth, its rising standard of living, the demand for high-quality, high-end US automobiles."

For the fiscal year ended June 30, 2017, vehicle exports from the port increased 45% to 76,000, while overall vehicle handling was up 13% to 318,000. Portland imports Hyundais, Toyotas and Hondas.

O'Hollaren expects this year, export gains will continue. Ford Motor Co. exports its cars to China and other Asian countries through the port, which recently inaugurated a new

*(**CLIMBING** – continued on page 15)*

Canada losing ground to Mexico in manufacturing race

By Matt Miller, AJOT

Two years back, prominent Canadian economist and car industry analyst Dennis DesRosiers shocked his countrymen when he predicted that Canada's car manufacturing would completely die in the decades ahead.

"Somewhere between 2030 and 2040 we'll be Australia," he told The Economist, referring to Australia, whose three manufacturers will all cease production by the end of this year.

Imports into the US from Canada and Mexico are almost at a par with each other. Last year, some 2.7 million vehicles were shipped from Mexico to the US, while 2.3 million came from Canada. But the trajectories of the two countries couldn't be more dissimilar. Despite Ford's well-publicized scrapping of a plant in the Central Mexican state of Guanajuato and Toyota and Mazda's recent announcement of a new joint venture plant in the US, manufacturers have been pouring into Mexico, while investment in Canada's auto industry is down to a trickle. (The new joint venture plant, for example, will likely produce Toyota Corollas now made in Canada.)

Add to that the likelihood that Chinese manufacturers will possibly set up plants in Mexico and the gap will only grow larger over the years ahead.

Canada "is losing several key, high-volume products," said Brandon Mason, the global automotive practice director at PwC, in a recent presentation at an Automotive Logistics conference. The consultancy believes, by contrast, that Mexico will remain a "significant growth center for the region," Mason said.

PwC forecasts that light vehicle assembly in Mexico will increase from 3.5 million in 2016, of which to almost 5 million by 2023.

For ports, shippers and carriers, the shift presents both opportunities and challenges and the logistics industry is scrambling. The supply chain from Canada southward is well-established, stable and consistent. CN says that it, alone, handles half the

*(**RACE** – continued on page 15)*

*(**CLIMBING** – continued from page 14)*
$7 million, 19-acre storage and staging yard to handle the increased export-related traffic.

Portland now boasts it is the biggest port for auto exports on the West Coast, punching well above its weight as North America's tenth largest port for total vehicle handling, and the fifth largest on the West Coast.

"We've enjoyed a long-standing reputation for automotive import handling," said O'Hollaren. "Now, increasingly [that reputation] is being built on exports."

"What's really helped us was the demand from China for high-end American vehicles, Mustangs, Expeditions, Lincoln Navigators," Ken O'Hollaren, Port of Portland OR

Putting it into Reverse

Picture American ports and vehicles. The image that immediately comes to mind are seemingly endless lines of imported cars from Asia and Europe driving off Ro-Ros and into mammoth staging areas, where they wait to be transported by rail or truck across the US. Gradually, however, that view is shifting into reverse.

"We expect to see further export increase from the US to markets abroad," said Brandon Mason, the global automotive practice director at PwC, in a recent presentation at an Automotive Logistics conference. "We'll still be a net importer of products. But we do expect that gap to close a little bit."

The export boost comes at an opportune time for US-based manufacturers active in exporting their finished goods. Last year, a record 17.5 million vehicles were sold in the US, marking the seventh straight year of growth. This year, sales are expected to decline 2% to 2.5%, according to Mason, despite more than one million vehicles destroyed by Hurricanes Harvey and Irma. For American new car buyers, 2018 and 2019 are also forecast to be down years.

Germany's BMW is the real star in the American vehicle export universe. Last year, BMW exported almost 300,000 SUVs from its Spartanburg, SC plant. Some 86% of these were shipped overseas from the Port of Charleston, representing an export value of more than $9.5 billion. Other ports that gained from this trade included two ports in Georgia – Savannah and Brunswick – and three in Florida – Jacksonville, Miami and Everglades.

Both Brunswick and Jacksonville are major terminals for car imports. However, Brunswick has registered two straight years of declined volume, while Jacksonville last year showed a 12% increase in imports, largely on the back of short-sea movements from Veracruz, Mexico *(see box on page 14)*.

For the first eight months of this year, vehicle exports from Charleston are down by almost 9%, according to port statistics. However, a new luxury model, the BMW X7, should boost demand. The X7, which was unveiled at the Frankfurt auto show in September, is scheduled to roll out of the Spartanburg plant soon.

BMW spent $1 billion during 2015 and 2016 expanding its South Carolina manufacturing facilities and announced earlier this year it would spend an additional $600 million from 2018 until 2021.

This has a huge impact on the ports, not only in terms of finished vehicles, but also in terms of the importation of the components needed in that assembly. Auto parts and tires together comprise about one-fifth of all goods imported through the Port of Charleston, for example.

"In the port industry there is no substitute for manufacturing, particularly automotive manufacturing. As such, BMW is an important customer for South Carolina Ports Authority," wrote the authority's president and CEO, Jim Newsome, in an email. "We handle imported engines, parts and components for their production process and export finished vehicles, as well as serve the supply chain needs of their vendors and suppliers

*(**CLIMBING** – continued on page 16)*

*(**RACE** – continued from page 14)*
country's vehicle production output, employing two- and three-level car carriers.

Vehicles coming from Mexico to the north are in a state of flux, and not because of President Trump's threats to slap high duties on Mexican products. That's true of finished vehicles and auto parts as well. According to a recent Brookings Institution study, Texas alone imports nearly $6 billion in auto parts from Mexico.

Take transport by ship as an example. During the first five months of this year, Mexico's finished vehicle traffic increased by more than 40% to 667,000, according to Mexico's Transport and Communications Ministry, as quoted in Automotive Logistics. Ports on the Gulf as well as the Pacific saw large gains. Exports account for more than half of these vehicle movements and are grew by almost 50% during this period. The Pacific port of Lázaro Cárdenas is undergoing a major investment program on a new terminal that will boost its capacity to export vehicles, welcome news for a country that suffers from port congestion, especially Veracruz, North America's largest port for finished vehicle movements.

While Mexico's ship-born vehicle, exports have traditionally been destined to other countries in Latin America, ship movements are gaining momentum as well, thanks to short-sea shipping. This is, in part, because of concerns that shipping by rail is bumping up against capacity issues. Take Honda, for example. Some two-thirds of the Japanese car maker's Mexico production moves by ship to the US, either out of Veracruz, to ports on the East Coast, or Lázaro Cárdenas, to ports on the West Coast.

BMW assembly plant in Spartenburg, SC

(*CLIMBING – continued from page 15*)
throughout the region."

As Newsome pointed out, the impact of a carmaker such as BMW is critical both directly and indirectly.

Jim Newsome – SC Ports Authority president and CEO

"BMW has been an important economic development tool for the Port and State. It was served as the launch customer of Inland Port Greer, which improves connectivity between the Port of Charleston and the Upstate of South Carolina utilizing an overnight intermodal rail service," he said. "It has been so successful that [the port authority] is constructing a second facility, Inland Port Dillon, scheduled to open early next year. BMW's success also helped South Carolina recruit Volvo's first U.S. production facility, which will begin production in late 2018."

US car exports last year accounted for $56.7 billion. Of course, an immense imbalance between imports and exports remains. In 2016, the US imported 8.2 million vehicles and exported only 2 million. However, about half of these imports came from fellow NAFTA countries of Canada and Mexico.

Localization

Set aside the Trump administration's tough talk on imposing import duties on Mexican products and the ongoing NAFTA renegotiation. Analysts expect regional production will increasingly mark the vehicle trade, with shifts from Canada to the US and Mexico taking place over the next few years. Localization is the industry's watchword. PwC's Mason talked about localization "particularly from South Korean and Japanese" vehicle manufacturers, with the possibility as well that Chinese manufacturers will begin to localize production in North America as well.

The latest indication of this trend came in August, when Toyota and Mazda announced a $1.6 billion joint venture assembly plant to be built somewhere in the US, with cars rolling off the lines beginning 2023. The plant will have a capacity of 300,000 cars a year, the two manufacturers said in their announcement.

That plant should further propel America's car industry. According to Mason, PwC projects more than 90% of vehicle growth will come from emerging markets, with China the dominant leader and India firmly in second place. But the US, which PwC had projected to be the world's sixth growth market, could vault to the number three position with the new plant, Mason said.

The Trump administration's scrapping of negotiations on the Trans Pacific Partnership (TPP) free trade agreement should put an additional damper on imports coming from Asia, analysts believe, as Japanese and Korean cars will not benefit from any duty-free status in the years ahead.

"If [TPP] had taken place, it could have slowed down production in the US," said Mason, who added that the "assembly outlook for the US is quite strong."

That's great news as well for ports such as Portland and South Carolina, which are increasingly shipping vehicles out of the country, not in.

(*POLICIES – continued from page 12*)
Mexican manufacturers.

The Entrada report agrees that Trump's trade policies, in the form of tariffs on Mexican imports, if it comes to that, could drive down the peso's value. But, the report cautions, "tariffs also have the potential... of creating havoc in the Mexican domestic economy, which could lead to political strife in Mexico as well as increased immigration to the United States and the rest of world," another trigger for Trump.

Factors that enter into currency exchange rates are notoriously complicated, and manufacturers should not assume, warns Entrada, that the cheap peso will last forever. The key correlation to peso value is the price of oil, according to Entrada, and if oil prices go up, as they have in recent days, so will the value of the peso.

PMSA criticizes LA/LB Clean Air Action Plan

By Stas Margaronis, AJOT

The Pacific Merchant Shipping Association (PMSA) criticized a new proposed "Clean Air Action Plan (CAAP)" by the Ports of Los Angeles and Long Beach stating it proposes costly initiatives that will further erode the competitiveness of the two ports.

In a September 18th letter, PMSA noted: "Over the past decade, diesel particulate matter emissions are down an incredible 87%. Even more astonishing, DPM (Diesel Particulate matter) is down 96% for trucks and cargo-handling equipment, the primary focus of this Clean Air Action Plan Update. This leaves 4% of remaining emissions that the CAAP Update proposes to reduce at a cost of $14 billion; a cost that undoubtedly understates the true costs of the CAAP and a cost that puts at risk the 1 in 9 jobs in the region that have made the San Pedro Bay ports the economic engine of Southern California."

The letter signed by PMSA Vice-President Thomas Jelenić says the two ports are making insufficient effort to shore up a declining U.S. container market share that dropped from 35.5% in 2006 to 32% in 2016, according to American Association of Port Authority data:

"PMSA requests again, given this lack of growth, that before this update to the CAAP is finalized, that staff analyzes the draft for its impact on competitiveness. In addition, the ports should develop a competitiveness goal, and integrate the goal into the CAAP to improve the ability of this gateway to attract and retain cargo."

Asked to comment about PMSA's letter, Heather Tomley, director of environmental planning at the Port of Long Beach said: "We've solicited and received comments from a wide range of our stakeholders on the Draft Clean Air Action Plan. We are reviewing and will take the comments into consideration as we finalize the Plan, which will be considered by our Boards this November. We remain committed to building on the successes of the CAAP, protecting public health and the environment as we grow trade and jobs."

Chris Cannon, director of environmental management at the Port of Los Angeles also responded saying: "We don't comment on the CAAP responses, other than to say we have been in regular dialogue with them about their CAAP concerns. We take them very seriously, and will consider them carefully as we prepare the final CAAP document."

PMSA is critical of the CAAP for pursuing a goal of zero-emissions by electrification: "The CAAP seems focused on driving a single technology outcome: zero-emissions by electrification. This is a mandate that is not necessary to achieve the ports', regions', or State's air emission reduction goals."

PMSA said that the Ports have underestimated the costs of converting cargo-handling equipment (CHE) to electrification: "We remain disappointed that the analysis of costs to electrify CHE is based on unfounded assumptions that significantly underestimate total costs."

Canadian naval chief underlines challenges of "new oceanic age"

By Leo Ryan, AJOT

A high-ranking commander of the Canadian Navy has proclaimed the advent of "a new oceanic age" characterized by surging maritime commerce, global power politics, the impact of climate change in the Arctic region, and the challenges for the United States especially of China's expanding involvement.

Rear Admiral Art McDonald, Commander of Maritime Forces Pacific, Royal Canadian Navy, presented a sweeping overview of developments on the world's oceans during a keynote address to the Sept. 19-21 Annual Conference of the Association of Canadian Port Authorities in Vancouver.

"Not since the great era of exploration in the 16th century," he said, "have oceans played as important a role in global affairs as they do today. Unprecedented levels of commerce move across the world's oceans, great power politics are being played out at sea, and oceans are central to the health of the planet in an age of profound climate change."

McDonald stressed that the oceans have become a global highway, accounting for 90% of world trade, with "the meteoric growth of the Chinese economy" constituting "a driving factor to this expansion."

"As evidenced by China's economic rise, Beijing has come to fully appreciate the flexibility, mobility and authority of seapower…manifested

*(**CHALLENGES** – continued on page 18)*

Port of Virginia begins double-stack rail service to Pittsburgh

The Port of Virginia is now offering access into Western Pennsylvania and Northwest Ohio via CSX's daily rail service to Pittsburgh.

"This will help to expand an important and growing market for The Port of Virginia," said John F. Reinhart, CEO and executive director of the Virginia Port Authority. "We are the East's leading rail port: we're moving 36 percent of our volume by rail and continuing to reduce our dwell times for rail containers. The goal is to continue growing our rail capabilities and offerings and expanding service in that region is critical to the effort."

Double-stack trains traveling between the Norfolk Harbor and Pittsburgh will move along CSX's National Gateway route to the rail carrier's new $60 million Pittsburgh Intermodal Rail Terminal. The terminal is located in McKees Rocks and opened Sept. 7.

The Pittsburgh terminal is the last piece of CSX's National Gateway Initiative, which is an $850 million project focused on creating a network double-stack rail and intermodal terminals that connects East Coast markets to consumers, manufacturers and businesses in the Midwest.

*(**CHALLENGES** – continued from page 17)*

in the appearance of a powerful new Blue Water navy."

Among other things, McDonald said, this "has meant that the existing hegemon, the United States, and the aspiring hegemon, China, find themselves competing for power and influence in the same oceanic realm – creating a context in great power geopolitics that has not previously coexisted with globalization."

What is more, he continued, "we will increasingly be called on to operate in new maritime environments that will challenge our assumptions, test our resolve and require our collective commitment to governance."

He singled out the Arctic as presenting such a case, adding: "Indeed, for the first time in human history, we are on the cusp of acquiring a new ocean."

The steady recent diminution of polar sea ice, McDonald said, promises to Canada and the whole world "a new and navigable ocean. The vast and remote nature of the North represents a unique challenge and the opening of this marine passage will have a large impact on marine transit. Already, there is notable international interest and activity from those wishing to exploit the commercial and economic potential of the region."

In this connection, he alluded to this past summer's circumnavigation of the Arctic via Canada's North West Passage by a Chinese research vessel.

But he then injected a cautionary observation. "And yet, despite historic pretension and modern curiosity and opportunism, one needs ask if marine trade exploitation (across entire Canadian Arctic) will ever be viable and desirable."

Meanwhile, McDonald said, it was "vital for Canada alongside its fellow Arctic Council member nations, to work together in a concerted way to ensure that the region's future is managed properly with consideration of the security, prosperity, environment and other elements germane to the deliberations."

On another subject, he said, that in view of the growing environmental risks in the new oceanic era, the Canadian Navy was taking steps to lessen its environmental impact – "an activity as important to us as it is to ports and shipping lines."

The latest example has concerned the protection of marine mammals off British Columbia's coast. The Canadian Navy voluntarily committed to participating in the Haro Strait vessel slowdown trial. It is the first study of its kind, focusing on the relationship between slower vessel speeds, underwater noise levels and their impact on the southern resident orca whales.

Generally speaking, with "various disturbing causes and rogue states" threatening international peace and normal maritime commerce, McDonald said the Canadian Navy has through the years actively supported security operations in such areas as the Gulf of Aden.

The Jones Act: a new face or new fate

By Matt Guasco, AJOT

On September 20th Hurricane Maria slammed into Puerto Rico with Category 5 winds, knocking out power and devastating much of the island's roads and infrastructure. Two weeks earlier, Hurricane Irma passing just north of the island also created significant damage. These storms dealt Puerto Rico a devastating blow. Fuel Oil and Natural Gas reserves were hardest hit, making it extremely difficult to restore power and electricity. As food, water and medical supplies become depleted, Puerto Rico faces a resupply problem. How to get the ports and infrastructure up and running so that relief can reach the people?

FEMA Begins Relief Operations

After assessing the catastrophic damage, on September 23rd FEMA issued a public statement on their relief efforts. They indicated that the island's ports were reopened to receive aid which was on its way. We need to keep in mind that Puerto Rico is three days sailing time from the main land. Much of the resupply of hard commodities could be performed by commercial Jones Act vessels. The media unfortunately misunderstood the nature of commercial activity into the Island not realizing the containerized cargo was not the problem. The critical issue would be the resupply of fuel oil and natural gas. In the aftermath of Irma, Customs and Border Protection allowed foreign tankers to load and transport refined petroleum to areas within coastwise commerce. This constituted a suspension of the Jones Act which prohibits the movement of such cargo by foreign vessels.

Cabatoge and the American Fleet

Cabatoge is defined as the transportation of cargo between two points within a country's coastal or territorial waters. As applied to the Merchant Marine Act of 1920 authored by Wesley Jones, it sets forth the requirement that all such commerce be performed by vessels built in the U.S. and crewed by American citizens and or permanent residents. While the definition of Cabatoge has expanded to include all forms of transport, as applied to the Jones Act, it relates to the movement of goods by sea.

Putting Product Where Needed

Suspending the Jones Act allows for the swift movement of petroleum from states where supplies are plentiful to areas most affected by the hurricane. As of 2016 there are only 53 U.S. flag Petroleum-Chemical tankers left in America, and none of these are LNG ships. On September 8th DHS issued an initial waiver for transportation between New York, Pennsylvania, Texas, and Louisiana to South Carolina, Georgia, Florida, and Puerto Rico. This was revised on the 12th to add the additional states of New Jersey, Delaware, Maryland, New Mexico, Mississippi, Alabama, and Arkansas to Florida, Georgia, South Carolina, North Carolina, Virginia, West Virginia, and Puerto Rico. Foreign flag tankers were responding, filling the gap for petrochemical and LNG carriage and providing needed tonnage to resupply affected areas.

President Trump Responds to the Current Need

On September 22nd, the suspension of U.S. Flag requirements ended, loading and discharge of petrochemical cargo had to be performed by that date. This is where the situation gets a little sticky. Hurricane Maria pummeled Puerto Rico with Category 4- 5 winds up to 150 mph. So now what do we do? Extend the Jones Act suspension again, enact a new one? Yesterday President Trump suspended the Act stating that a request for such action had been received by Gov. Ricardo A. Rossello. While the suspension applies to all commercial cargos moving from the United States to Puerto Rico, hard commodities have been moving by Jones Act Vessels. Also as the American Maritime Partnership points out, trade to and from the island is routinely carried by both U.S. and foreign flag vessels depending on the origin of the cargo. The critical issue is in the movement of petrochemicals. So, is it time to take another look at whether the current Jones Act meets our needs?

In Support of the Act

In spite of the need to suspend U.S. Flag service from time to time, some would argue that the Jones Act still serves a useful purpose. In May, the CBP decided to maintain Jones Act exemptions for the off-shore drilling industry. The Offshore Marine Services Association (OMSA) argued these exemptions put hundreds of jobs in the hands of foreign workers. OMSA has been trying to control the offshore drilling and supply industry for over 8 years. The ruling they said affected not only supply boat crews but American shipyards which build and service supply boats. The Shipbuilders Council of America (SCA) felt the decision was CBP's way of passing the issue down the road, a deferral that "only hurts the more than 400,000 men and women of the US shipyard industry."

Ocean Carriers serving Puerto Rico, Hawaii and American possessions see the Jones Act as essential to stability within the U.S. maritime trade. Management at Matson Navigation stated that it is… "The single most important piece of legislation to Matson." Hawaiian legislators from Daniel Inouye to Mazie Hirono have long cited the training and recruitment of American merchant seaman, service stability and national security as the reasons for maintaining the Jones Act.

Cost of Doing Business

Alaska, Puerto Rico and Hawaii sustain much

*(**FACE** – continued on page 21)*

ALMC

Asian Logistics and Maritime Conference
亞洲物流及航運會議

23-24 November 2017

Hong Kong Convention and Exhibition Centre

Conference • Exhibition • Business matching

2017 Focus:

- Belt and Road Initiative – ASEAN and railway logistics
- Latest e-commerce logistics developments
- Smart logistics

30% early bird discount
on or before 13 October

Register now at
www.almc.hk

Tel: (852) 1830 668
Email: almc@hktdc.org

Kerry Globalink
Mr Siddique Khan
President

Seko Logistics
Mr James Gagne
President

Yamato Global Logistics Japan Co, Ltd
Mr Katsuhiko Umetsu
Director and Chairman

Ocean Network Express
Mr Jeremy Nixon
CEO

Hutchison Port Holdings Limited
Mr Eric Ip
Group Managing Director

The Caravel Group
Mr Angad Banga
Chief Operating Officer

DVB Bank SE
Mr Domenik Nizet
Senior Vice President,
Shipping Finance
Asia Pacific & Middle East

Arrow Shipbroking Group
Mr Burak Cetinok
Head of Research

Chain of Things
Dr Hans Lombardo
Co-Founder & COO

Flexport
Mr Henry Ko
Managing Director Asia

Organisers:

香港特別行政區政府
The Government of the Hong Kong Special Administrative Region

HKTDC 香港貿發局

In association with:

LOGSCOUNCIL 香港物流發展局 Hong Kong Logistics Development Council

HONG KONG MARITIME AND PORT BOARD 香港海運港口局

An event of:

HONG KONG 香港海運週 2017 MARITIME WEEK

17th Annual Port Industry Day held in Jersey City

The 17th Annual Port of NY-NJ Port Industry Day took place at Liberty House in Jersey City, NJ on October 2nd. With approximately 600 conference registrants and exhibitors attending, the event highlighted developments, initiatives and issues related to shipping through the Port.

(L to R) Father John Corbett – Stella Maris, Craig Turne – Buffalo-Niagara ITGO, Tom O'Rourke – ACL, Rainer Dehe – Philaport

(L to R) Mark Glickman, Adrienne Harrison, Steve Banasiak, James Overley (all from East Coast Warehouse)

(L to R) Rich Hanson, Steve Park, John Lewis (all from DCLI)

(L to R) Dan Mulligan, Ana Quintela (both from GCT)

(L to R) Eric Anderson – Portwide, Bob Gaffney – PANYNJ, retired,Tom Delaney – Portwide

(L to R) Jeff Rosenberg, Larry Li, Tony Zhang, Matt Dillon (all from ZPMC)

(L to R) Damon Piatek – Welke Customs Brokers, Stephen Lyman – Seaman' Church Institute, Chris Scalisi – Welke Customs Brokers

(L to R) Charles Liou, Kristen Figaro,Ryan Flanagan (all from PANYNJ)

(L to R) Martha Nevins – Logfret, Manohar Patwarden – Intelistics, Peggy Mecca – Mecca Trucking, Tom Heimgartner – Best Transportation

(L to R) Dan Bajic – TSI, Matt Ruisz – TSI, Chris Esposito – TSI, Ron van Arkel – Terberg Tractors Americas

(***JITTERS*** *– continued from page 9)*
ports, to ease the burdens of truckers."

"We need more hours at the port and more drivers and we also need to stagger pick-ups and drop offs," agreed Steve Schulein, vice president for drayage at National Retail Systems. The Port of Oakland charges a $30 gate fee per shipment and is open 24 hours a day, he noted.

"I'm happy to pay the $30 gate fee in Oakland," said Alison Leavitt, managing director of the Wine and Spirits Shippers Association, which primarily uses the ports of Oakland and New York and New Jersey for importing and exporting. "Shippers are willing to pay for service that actually works."

Bader noted that a truck reservation system has produced some improvement at one NYNJ terminal, but, in general, he's not crazy about reservation systems, because there is not enough evidence to prove that they work consistently.

Reservation systems aren't a panacea, agreed Leavitt, because they often don't accurately reflect how long it takes a driver to get from point a to b for pickups and drop-offs. They are also often too rigid, leaving drivers in the lurch if a specific container is not available for pickup and the system doesn't allow the driver to service another container.

"Automation doesn't solve everything," she said. "Sometimes you really need to get someone on the phone to solve a problem" but that's increasingly difficult in today's environment.

Bader acknowledged that improvements have been made and that these have come about "as a direct result of stakeholders working together, sharing ideas and listening to each other's concerns and feedback. Taking a rational and reasonable approach—that is the greatest asset we have at the port of New York and New Jersey."

*(**BENEFITS** – continued from page 8)*

"The second span for vehicular traffic is still underway," she explained. But the aspect of the project providing navigational clearance for vessels is finished. The full project is scheduled to be completed in 2019.

In a sense, the Bayonne Bridge situation was a blessing in disguise for the port of New York and New Jersey, because it clued the port early on into what the future held. "When ships got to 7,000 TEU and started hitting the underside of the bridge," related Rooney, "we began a dialog with the ocean carriers and in those discussions, we learned that ships would be getting ever larger."

When the Port Authority designed the new bridge, it was being told that ship sizes would cap out at 12,000 TEU. That's now ancient history. In 2012, 84% of the cargo handled at the port was carried on vessels of 6,000 TEU or less. Today, that figure is 28%. Two years ago, only 35% of the container vessels calling on the port were of 8,000 TEU or larger. So far in 2017, it's 60%.

Given the breathtaking speed at which container ships were growing, the approach taken by NYNJ, was to take a long look into the future. "We decided we needed to go well beyond the minimum capabilities the carriers were telling us," said Rooney.

Cargo continues to grow at the port even as the number of ship calls decline. August 2017 was a record breaker at the port with an increase of 7.5% in cargo, even as the number of vessels serviced fell by 18%.

Containers tend to dominate port talk these days, but the port of New York and New Jersey handles the full spectrum of cargo. "The port would not be what it is today without its auto business," Rooney told the Port Industry Day audience.

What is in the Tea Leaves?

And, while bulk cargoes are down at the port at the moment, bulks might be one of the waves of the future, together with containers, at least according to the tea leaves that Rooney is reading. The growing on-demand economy is symbolized not only by the explosion of e-commerce but also by the increasing sophistication of 3D printing and the emergence of 4D printing, a futuristic concept that posits printing objects that reshape themselves or self-assemble over time.

Currently, lots of spare parts for cars, boats, airplanes, and machinery enter the port of New York and New Jersey in containers. But what if, in the future, these parts will be printed on the spot, instead of being imported?

"We have to question whether we will continue to see the same kind of annual growth in container volume we've seen year after year," said Rooney, "or whether there be less finished goods."

If that's the case, the port of the future may be handling more imports of bulk materials and will need to be responsive to that eventuality. "We are taking issues like that into consideration right now," said Rooney, "as we develop our master plan for the next 30 years."

Goals for that endeavor include land use optimization and "getting more bang for the buck," said Rooney. "We need to adjust to how the industry is going to look 30 years from now."

In the shorter term, Rooney predicted that the port of New York of New Jersey will be elevated from its current third-place position among U.S. ports—behind Los Angeles and Long Beach—to number two "in the not too distant future."

It was 20 years ago or so that port leaders saw the need to deepen the channels and raise the Bayonne Bridge in order to accommodate developments that are unfolding today. "Thirty years from now," said Rooney, "I hope our successors will stand up here and be able to thank us for the foresight to figure out what we needed to do."

*(**FACE** – continued from page 18)*

higher transportation costs for fuel and consumer goods. Hawaii is a perfect example of why the Jones Act should be reviewed. In Manhattan consumers pay one fourth the cost for electricity as their counterparts in Honolulu. Energy costs run almost $50.00 per month higher in Anchorage as well because of the cost of transportation.

According to MARAD, the cost of operating a U.S. Flag vessel is 2.7 times higher than for an equivalent foreign flag vessel. U.S medium range tankers are three times more expensive to build in the U.S than on the world market. Within the United States it is less costly for oil and natural gas producers in Texas to export product than to sell it to consumers in the Northeast. Intercoastal tankers built in America cost about three times as much as they would on the world market making the cost prohibitive. The Texas comptroller's office indicates that because of the limited number of U.S. built tankers moving product, it is cheaper to import oil from Nigeria to the Northeast $1.45 to $1.70 per ton than to move it from the Gulf $5.00 to $6.00 per ton.

Argument for Repeal

Former Senator Inouye once said, "…we are reminded that a strong merchant marine fleet is vital to the security of this nation and a critical supply link for our troops fighting overseas…" While he was talking about American built vessels, the statement could also apply to foreign ships reflagged under the DOD's Maritime Security Program. A continued strengthening of MSP can supply the logistic needs of the Military and the DOT in times of national emergency. With crew requirements being met by U.S. officers and seamen it isn't necessary for our auxiliary fleet to be built in the United States.

In 2016 Senator John McCain proposed an amendment to the Energy Modernization Bill which would remove the requirement for oil and gas tankers to be built in the United States. Recently the senator introduced the "Open America's Waters Act of 2017". Senator McCain has been a strong advocate for repealing the Jones Act claiming that burdensome regulations stifle the economy and hinder free trade. He believes the purchase of foreign built vessels by American carriers would allow U.S. business interests to be more competitive in the global market. S 1561 as written currently applies only to tankers and LNG carriers but cargo vessels while not specifically mentioned could be included under a broader interpretation of the act.

So, Where do We Go?

There is little argument for American Flag Vessels to be manned by U.S. trained merchant seamen. It's required under the Jones Act and by MARAD for reflagged ships in America's auxiliary fleet. Building requirements could be reviewed and the percentage of foreign components revised to allow greater flexibility. Currently under the act a qualified "U.S. ship" must be completely assembled in the States and all of its major components manufactured here. No more than 1.5% of its steel hull casting can be of foreign origin. What if we relaxed these rules? If we agree that major construction should be performed at U.S. shipyards, then perhaps a larger percentage of components could be of foreign origin. CBP exemptions in offshore drilling point to a broader interpretation of building requirements. *A need to supply that industry's demand led to relaxation of the rules. Does the recent suspension of domestic fuel carriage make a similar case? Are we supporting the Jones Act for tradition's sake? Or are certain parts of the act simply out of date?*

Intermodal & Logistics News

Manhattan becomes proving ground for Daimler electric trucks

Daimler Trucks is trying to gain a foothold in the nascent electric-truck market with short-range haulers that can make New York City's clogged streets cleaner and quieter.

At an event in Manhattan's fashionable Soho neighborhood, the Daimler AG unit unveiled its new Fuso eCanter, an electric light-duty truck produced under the Mitsubishi Fuso brand. The hauler has a range of 60 to 80 miles (97 to 129 kilometers) between charges, depending on body, load and usage, Marc Llistosella, chief executive officer of Mitsubishi Fuso Truck and Bus Corp., said.

Daimler is supplying a fleet to several New York City non-profits and United Parcel Service Inc. has signed on as the first commercial customer in the U.S., according to a company statement. Llistosella said the trucks will contribute to Mayor Bill de Blasio's lofty goals to curb citywide emissions.

"If you want to change some paradigms, you need more than yourself—you need stakeholders, you need support," Llistosella said before the truck was unveiled amid recordings of chirping birds and a machine blowing soap bubbles. "Electrification of trucks is important to our society."

Truck Crowd

Daimler is joining a growing crowd. Diesel-engine maker Cummins Inc. beat Tesla Inc. to the punch last month with a fully electric "urban hauler" concept, which has a projected range of about 100 miles. Tesla plans to unveil an electric-powered semi next month and has met with states about testing out autonomous-driving features. Paccar Inc. and Navistar International Corp. are working on alternative-fuel strategies and driver-assistance systems to push trucking technology forward.

Llistosella said Daimler is ahead of the competition because the Fuso eCanter is the first electric truck to be mass-produced. Fuso will deliver 500 trucks within the next two years, then make more than 10,000 in 2019, he said. UPS agreed to lease three trucks and municipalities in Portugal and Japan are also customers.

Daimler is offering two-year leases for about $1,000 a month, a price Llistosella said has dropped 65 percent from the first prototype of the truck built in 2014. The company is choosing to lease rather than sell so that it can offer customers upgrades as battery costs drop.

Diesel Difference

The eCanter is more expensive than a diesel truck and offers about 10 percent less maximum payload, Llistosella said. Drivers can offset the premium in about two and a half to three years thanks to lower maintenance and fuel costs.

Light-duty trucks make sense in urban environments for garbage routes and deliveries because the range needed rarely exceeds 100 miles and trucks return to charge in the same place every night, said Lee Klaskow, a transportation analyst.

"The reality is the technology isn't there to support anything else," he said.

Daimler, which is working on autonomous-driving technology for its trucks, will introduce its own long-haul semi concept at the Tokyo Motor Show in October, Llistosella said.

"Right now, it's not technically possible, but it will be in only a couple of years," he said. "It's not a question of if, it's just a question of when."

Waymo CEO says self-driving trucks may come before taxis

Alphabet Inc.'s driverless vehicle technology may come to market first in trucks, rather than as an autonomous ride-sharing service.

John Krafcik, chief executive officer of Alphabet's Waymo division, said he's exploring at least two paths for its self-driving systems and software.

"Ride-sharing makes a lot of sense for the world," he said at Bloomberg's Sooner Than You Think conference on Cornell University's Tech engineering campus in New York City. "For goods transportation, which could travel primarily on highways, there's a good and compelling use-case there, too. Either of those two might be the first ones you see."

Krafcik has noted the company is looking at logistics and delivery models, but he has not shared details on its plans for a trucking or goods transit service. Waymo has confirmed that it owns one truck it is testing with self-driving software and sensors.

The Alphabet arm started a small ride-sharing trial earlier this year outside Phoenix, inviting hundreds of people to hail its self-driving minivans using a mobile app. That program is free at the moment. And, so far, Waymo only has one automaker supplying vehicles, Fiat Chrysler Automobiles NV.

To get more partners, Krafcik is pitching automakers on a radical new per-mile business model: They can make more money providing a mobility service over the lifetime of their vehicles, rather than one time up front when they sell cars and trucks.

Detroit's giants, Ford Motor Co. and General Motors Co., have spent hundreds of millions of dollars on their own autonomous technology and programs, and so far have been cautious about teaming up with Waymo.

Krafcik said these efforts were "examples of experimentation and learning," not a sign of resistance to Waymo's overtures. He equated them with the practice at Boeing Co. and other airline companies, which hire jet engine specialists. They don't manufacture the engines, but their engineers help source them. "That helps them be a very smart purchaser," he said.

Would carmakers like GM, Ford and Honda Motor Co. eventually ink deals with Waymo? "Some may," Krafcik said. "It's possible."

Driverless trucks will be great (except for truckers)

For generations, the open road has provided good jobs for Americans, whether truckers, novelists or country-music lyricists. Soon it may be crowded with some less sympathetic protagonists: self-driving robots.

Trucks with some degree of automation are already plying ore mines and hauling freight. Investment is pouring into the industry. As Congress debates a new law to promote self-driving technology, however, it may exempt big commercial vehicles in the hope of saving trucking jobs. That won't work. But it might succeed in holding back innovation and growth.

Automation doesn't only replace jobs. It can lead to faster employment growth, as the combination of human and robot labor improves productivity. Many of the automated systems now in development allow trucks to drive themselves on highways but require a person to take over on urban streets or when things go wrong.

This suggests that trucking jobs are less likely to disappear than to morph into tech-and-logistics work—requiring new skills, but also offering better pay and working conditions. For an industry with high turnover, long hours, low wages, a persistent labor shortage and often-burdensome terms of employment, that should be an appealing prospect.

Down the road, as technology improves, the benefits may become even more pronounced. Given that most accidents result from human error, more autonomy should reduce the 350,000 crashes involving large trucks on American roads each year. That should drive down insurance premiums, reduce repair costs and—not least—save lives.

Self-driving big-rigs also wouldn't be subject to rules limiting driving hours, meaning they could deliver products faster and more predictably. Given how integral trucking is to the U.S. economy—delivering some 70 percent of goods and producing $700 billion in revenue a year—that could be transformative. A final advantage is environmental. Automated trucks can move in herds—"platoons," in the idiom—with a lead vehicle setting the pace and others trailing in a coordinated caravan. Wireless communication allows them to follow each other quite closely, thus reducing wind drag and congestion. Such convoys can improve fuel economy by up to 10 percent for the trailing trucks, which means savings of perhaps $8,000 per truck per year.

It's no wonder that competition to develop such technology is surging. In California alone, 40

*(**DRIVERLESS** – continued on page 23)*

An infrastructure deal should be easy, but isn't

The lingering devastation from the hurricanes that crippled Houston and Florida underscored the national problems of crumbling roads and bridges, inadequate transportation systems and aging electrical grids. President Donald Trump and congressional Democrats both want Washington to spend billions on repairs and construction.

The need is critical. The American Society of Civil Engineers recently gave the country's infrastructure a D-plus grade and estimated that its deficiencies will cost the economy $4 trillion over the next decade. As Floridians go days, stretching into weeks, without power, and with old people dying in nursing homes, the urgency is clear.

"We should learn from these tragedies, the trail of devastation across Texas and Florida," said Marcia Hale, president of the nonpartisan advocacy group Building America's Future. Advocates say the U.S. should invest $1 trillion in public infrastructure, a figure Trump has also touted—before proposing infrastructure spending cuts in his 2018 budget.

Politically, there are opportunities for horse-trading. New York and New Jersey could get federal funds for a badly needed rail tunnel under the Hudson River. Texas could get help paying for a high-speed train between Houston and Dallas. Urban representatives could obtain financing for mass transit while investments in broadband communications would appeal to rural lawmakers.

Most ambitiously, Democrats could even offer to support tax reform, which congressional Republicans badly want, in exchange for Republican votes for infrastructure spending.

Representative Josh Gottheimer, a New Jersey Democrat who's trying to assemble bipartisan coalitions on issues like infrastructure, was in a meeting with Trump last week and came away cautiously optimistic.

"We talked about different issues but he really emphasized infrastructure and was open to putting it together with tax reform," Gottheimer said. "There are a lot of tough questions but at least it's an encouraging first step."

It should be. But a heavy dose of skepticism is appropriate in today's polarized Washington, now more dysfunctional than ever under an inexperienced and inexpert administration led by an unreliable president.

"Everyone is talking a good game and everyone knows the needs, but the problem is where to get the money," said Ray LaHood, a former Republican congressman and Transportation Secretary under President Barack Obama and a forceful infrastructure advocate. "You can't do it chintzy."

Although Trump made big promises during the campaign and in his first days in the White House, the administration's initial plan is for a meager $200 billion spread out over a decade and is reliant on private partnerships. Advocates like LaHood don't object to public-private collaboration on some road and airport projects, but say the Trump plan isn't close to adequate.

There are, for example, about 58,000 deficient U.S. bridges, almost a tenth of all the bridges in the country. Tolls could finance a small portion of the necessary repairs, but the real money would probably have to come from a hefty boost in the federal gasoline tax, which has been stuck at 18.4 cents per gallon since 1993. LaHood said that 25 states have raised their own gasoline taxes, and "no one has lost an election because of it."

Even Trump, on occasion, has indicated support for a higher gas tax, but it's a non-starter for most Republicans. Grover Norquist, the party's anti-tax enforcer, says he not only opposes any hike but wants to turn the current proceeds back to the states.

Gottheimer and other Democrats, accepting this reality, argue that the best route to a bipartisan deal is to bundle tax reform with infrastructure spending. They see some of the funding coming from tax-reform measures like the revenue that would be generated by allowing corporations to repatriate foreign income at a favorable rate. Republicans, however, want to use that money to cut the

*(**DEAL** – continued on page 23)*

AIR CARGO NEWS

Qatar Air eyes new 747 deal as embargo spurs cargo demand

Qatar Airways Ltd. is considering whether to order more Boeing Co. 747 jumbo freighters as global air cargo rebounds and the Persian Gulf carrier responds to a blockade of its home country.

The jets, featuring a hinged nose that flips open to load oversize equipment, would help the Doha-based carrier make good on its ambition to become the largest international cargo operator in the world, Chief Executive Officer Akbar Al Baker told reporters during a visit to Seattle to take delivery of the first of Qatar Air's two 747-8 freighters.

Boeing has been scrambling to land additional 747 orders to extend the commercial life of its iconic hump-backed jet into the next decade. The Chicago-based planemaker had 20 unfilled jumbo orders as of the end of August, including the two jets now identified as bound for Qatar Air. That's the equivalent of about three years of production at its current six-jets-a-year pace.

Qatar Air's cargo division is flourishing as demand rebounds from a lengthy slump, with industry-wide loads up 11 percent this year through July, according to the International Air Transport Association. Qatar ranked as the world's fourth biggest air-freight carrier last year by tons moved and second only to Dubai-based Emirates excluding specialist operators FedEx Corp. and United Parcel Service Inc., based on IATA data.

The flight embargo imposed in June by neighboring nations to penalize Qatar actually has provided a benefit, Al Baker said. Air-freight deliveries have climbed 160 percent from a year ago as Qatar Air has airlifted in fresh food, medical equipment and other supplies. Four Arab nations severed diplomatic and transport links with Qatar as punishment for allegedly backing Islamic militants, a charge the Gulf nation denies.

Unintended Boon

"I'm pleased to tell you today that in fact the blockade has quite the opposite impact on our business to the one intended," Al Baker said. "Our adversaries thought they would bring us to our knees and we would capitulate, but this didn't happen."

He dismissed any suggestion that Qatar Air might delay aircraft orders because of the blockade or slowing travel growth in the Middle East. "We are not studying any deferrals because Qatar Airways' aircraft orders are not all growth airplanes," Al Baker said. "They are also fleet replacement."

The carrier plans to take all 110 of the Boeing 777X planes that it has committed to buy from Boeing through orders or options. And it expanded a previous order for 44 of Boeing's 777-300ER by four aircraft, a deal previously recorded on Boeing's backlog without disclosing the buyer. Combined with the two jumbos, the aircraft are worth $2.16 billion at list prices before the customary discounts.

Qatar Air has decided to take all of the Airbus SE A350 aircraft it has on order, reversing an earlier plan to cancel four deliveries, Al Baker said.

As to Qatar Air's ongoing war of words with U.S. carriers over access to the world's biggest aviation market, Al Baker advised its rivals to "shut up and mind their own business." The Mideast company's expansion should continue with the closing of a deal to take a 49 percent stake in Italy's Meridiana as early as this month, he said.

FedEx cuts profit forecast on $300 million hit from cyberattack

FedEx Corp. put a price tag on the initial impact of a worldwide cyberattack that engulfed the company's TNT Express unit in Europe: $300 million.

The blow last quarter from lost sales, stepped-up technology investments and recovery costs forced the U.S. courier to cut its annual earnings forecast. While "substantially all" of TNT's critical operating systems are working again, its package volume, revenue and profit trailed their levels before the intrusion, FedEx said.

The report provided the first revelation of the financial damage from a computer virus that slowed shipments and forced TNT to process some transactions by hand. FedEx said the performance of its ground-shipment unit in the U.S. also weighed on results in the three-month period ending Aug. 31, as did Hurricane Harvey, which caused flooding along the Gulf Coast.

"It was worse than people expected," Logan Purk, an analyst at Edward Jones, said in an interview about the financial damage from the cyberattack. "That's a pretty big headline number they disclosed. But at the end of the day, that's driving essentially the earnings miss and the guidance cut. You strip that event away and I still think there's a well-oiled machine here that still has a lot of long-term value."

Forecast Cut

Earnings will be a maximum of $12.80 a share for the fiscal year ending in May, excluding certain items, FedEx said. That was down from an original projection of as much as $14 a share and less than the $13.10 average of analysts' estimates.

The cyberattack prompted FedEx to accelerate the process of combining TNT with its Express air-shipping unit, in an effort to reduce exposure to the Dutch business's legacy technology systems. That means the expected $800 million integration cost, and the process's planned completion by the end of fiscal 2020, are subject to change.

Most TNT services were restored during the quarter that ended last month, FedEx said. The company expects "ongoing but diminishing" financial effects from reduced revenue and stepped-up investments in remedies. It is also examining insurance coverage to protect against similar assaults in the future.

FedEx acquired TNT for $4.8 billion last year, gaining an extensive parcel-delivery system in Europe to compete with United Parcel Service Inc. and Deutsche Post AG's DHL. The just-completed quarter was the first in which FedEx reported TNT results as part of its Express division. TNT primarily serves industrial, automotive, high-tech and health-care industries.

FedEx reaffirmed its commitment to boost operating income at the Express division by $1.2 billion to $1.5 billion by 2020 compared with the 2017 level.

*(**DRIVERLESS** – continued from page 22)*

companies now have permits to test self-driving gear.

They're up against ambitious automakers and tech firms from around the world. Although Congress may impede American companies in this competition, it won't stop the technology's advance.

Nor should it want to. A better approach is to help displaced truckers learn new skills, find other work and otherwise adjust to a new economic reality. There's no shortage of ideas for doing so. Improve apprenticeship programs. Reform community colleges so they retain more students. Expand wage subsidies, retraining loans, and incentives for workers to move where the jobs are.

Imposing such remedies won't be easy. But the work should start now, while the disruptions are in view and there's still time to adapt. To paraphrase a trucking enthusiast from a simpler era: There's a long way to go, and a short time to get there.

Musk's new vision: anywhere on Earth in under one hour

Elon Musk, who has long dreamed of creating a human colony on Mars, is planning to build a new rocket ship code named "BFR" capable of traveling anywhere on Earth in under an hour.

If the concept becomes reality, Musk said a journey from New York to Shanghai can be done in about 30 minutes. The surprise announcement means that his Space Exploration Technologies Corp., which has already disrupted the aerospace industry with reusable launches, plans to ferry humans not just to distant planets but across this one as well, setting up a potentially competitive challenge to the commercial airline industry.

"If we are going to places like Mars, why not Earth?" Musk said Friday at the 68th International Astronautical Congress in Adelaide, Australia. Toward the end of Musk's highly technical presentation, animation played on a big screen behind him, showing scores of people getting on a high-speed ferry in New York, then boarding the BFR on a platform in the water. The spaceship then travels to Shanghai in roughly half an hour.

"Fly to most places on Earth in under 30 mins and anywhere in under 60," Musk wrote in an Instagram post after he'd left the stage without taking questions. "Cost per seat should be about the same as full fare economy in an aircraft. Forgot to mention that."

With many commercial satellite operators as customers, the revenue from those contracts will help fund the development of the BFR, which would be capable of carrying satellites to orbit, crew and cargo to the International Space Station, and complete missions to the Moon and Mars, said Musk. He said the BFR would contain 40 cabins capable of ferrying roughly 100 people at a time.

Red Dragon

Musk, 46, has a net worth of roughly $21 billion and has said in the past he'd use his own personal assets to help fund his vision. He first detailed his Mars plans in a talk at the IAC in Guadalajara, Mexico, a year ago and later published a paper about it, generating enormous excitement but raising concerns it included few details on financing. Musk promised his Twitter followers this summer that his updated Mars plan would address the lack of payment details—which he called "the most fundamental flaw" in his first take.

Previously, Musk had talked about sending an unmanned "Red Dragon" spacecraft to Mars in 2018. That plan, as well as the spacecraft, has been shelved. The new plan calls for the first BFR to land on Mars in 2022, followed by crewed missions in 2024.

Musk, who's also CEO of electric-car maker Tesla Inc., founded SpaceX in 2002 with the ultimate goal of enabling people to live on other planets. The closely-held space exploration company currently flies the Falcon 9 rocket for customers that include NASA, commercial satellite operators and the U.S. military. The Hawthorne, California-based company also has plans to launch its own satellite network.

Drone Ships

The cost of a Falcon 9 launch is roughly $62 million, according to SpaceX's website, with modest discounts available for contractually committed, multi-launch purchases. SpaceX's rockets are designed for reuse, with rocket reusability now seen as key to making space travel affordable. SpaceX celebrated its first launch using a previously flown booster in March and regularly recovers the rocket's first stage on land or on "drone ships" at sea.

SpaceX has completed 13 launches so far this year and has several missions on its manifest, including back-to-back launches slated for October 7th and October 9th.

*(**DEAL** – continued from page 22)*

corporate tax rate; there isn't enough to do both.

The bundling approach also assumes that Republicans can agree among themselves on a tax-reform plan that Democrats could buy into. First, Republicans would have to settle their own problems, including poor coordination between the White House and Capitol Hill. Last week, after a Trump Twitter storm, House Speaker Paul Ryan promised an expeditious timetable, one other Republicans consider unrealistic.

Then they'd have to find the will to resist lobbying by interest groups determined to preserve the tax advantages they now enjoy. That's a huge stretch.

So their final product is likely to be more about tax cutting than actual reform, with a tilt to corporations and the affluent. Few Democrats will support that approach even with infrastructure sweeteners.

As for Republicans, although House Ways and Means Committee Chairman Kevin Brady doesn't reject linking the two issues, listen again to Norquist, a man of considerable influence in conservative circles: "Putting spending inside a tax reform package simply increases the deficit or reduces the size and power of potential tax cuts."

That's all many right-wing Republicans need to hear before they kiss infrastructure improvements goodbye.