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NORTHEAST PORTS
CHEMICAL TRANSPORTATION
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GP Cellulose LLC's supply chain director, Carter Noland, second from right, discusses shifting ocean carrier alliances with, from left, Jim Prior, divisional vice president for transportation, Coach Inc.; Fabio Santucci, president, Mediterranean Shipping Co. (USA) Inc.; Richard Craig, president and chief executive officer, MOL (America) Inc.; Charlie Cunnion, director of global transportation, International Forest Products LLC; and Mike Wilson, senior vice president for business operations, Hamburg Süd North America Inc. (Photo by Paul Scott Abbott, AJOT)

New ocean carrier mega-alliances viewed as benefiting cargo owners

By Paul Scott Abbott, AJOT

As new ocean carrier mega-alliances launch this month, shippers may expect service improvements and other benefits, according to container line and beneficial cargo owner executives speaking at a conference hosted by the Jacksonville Port Authority.

The latest alliances were among topics about which optimism was expressed March 21 at the JAXPORT Logistics & Intermodal Conference in St. Augustine, Florida.

"We're going to make shipping great again," said Fabio Santucci, president of Mediterranean Shipping Co. (USA) Inc.

Richard Craig, president and chief executive officer of Mitsui O.S.K. Line unit MOL (America) Inc., commented, "I'm confident we're going to have a smooth transition."

And Mike Wilson, senior vice president for business operations at Hamburg Süd North America Inc., said he believes new carrier alignments should facilitate enhanced efficiencies, with relationships and service product quality continuing to be the keys as container lines increasingly recognize the importance of "the virtual train."

Beginning operations in April are the Ocean Alliance, consisting of CMA CGM, China Cosco Shipping, Evergreen Line and Orient Overseas Container Line, and the Transportation High Efficiency Alliance, or THE Alliance for short, of Hapag-Lloyd, "K" Line, Mitsui O.S.K. Line, NYK Line and Yang Ming.

Meanwhile, the 2M Alliance of Maersk Line and Mediterranean Shipping Co. adds Hyundai Merchant Marine and Hamburg Süd volumes via slot charter agreements, as Maersk advances its plan for acquiring Hamburg Süd.

Beneficial cargo owners on the same panel joined the carrier executives in taking a relatively favorable stance.

Carter Noland, supply chain director at major pulp producer GP Cellulose LLC, said he expects transit times

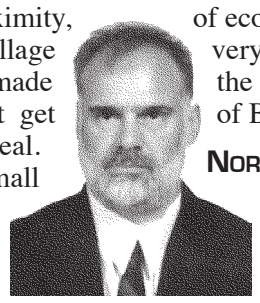
*(**VIEWED** – continued on page 15)*

Wal-Mart Stores Inc.'s director of global logistics, Anthony McAuley, second from right, offers thoughts on Puerto Rico trade to fellow panel participants, from left, moderator Rick Schiappacasse, director of Latin America sales, Jacksonville Port Authority; Mitch Luciano, president and chief executive officer, Trailer Bridge Inc.; Craig Mygatt, chief executive officer, SeaLand; Anthony Chiarello, president and chief executive officer, TOTE Inc.; Sergio Sandrin, president, Aqua Gulf Transport; Thomas B. Crowley Jr., chairman and chief executive officer, Crowley Maritime Corp. (Photo by Paul Scott Abbott, AJOT)

City-port – Port of Boston 2017

By George Lauriat, AJOT

Boston is a pattern of neighborhoods. The airport and port itself are all merged in close proximity, linked by a bewildering collage of streets and alleys that has made the local saying "you can't get there from here" seem very real.



Boston is at once both small and large. The city roughly has a population of 670,000 but the greater Boston area is nearly 7.6 million. Perhaps more than most North American cities, Boston is a great deal more than permanent city-dwellers. Every year 350,000 plus undergrads take up residence accounting for $4.8 billion in economic activity.

From a metropolitan GDP perspective, Boston is the 6th largest in the U.S. and 12th largest in the world. In short, there is a remarkable amount of economic activity confined to a very small area, which brings up the port component of the City of Boston.

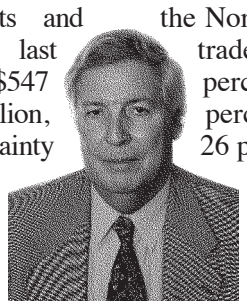
Northeast Ports

The Port of Boston has in recent history been measured more against what it is not, more than what it is. It is not the Port of New York/New Jersey mega-port handling 4.56 million TEU in 2016 (200 miles from Boston), nor a Port of Montreal at 1.34 million TEU (300 miles) or even the Port of Halifax (400 miles) – major ports which bracket the New England

*(**BOSTON** – continued on page 10)*

Cargo growth pattern returns at Canada's East Coast ports

By Leo Ryan, AJOT



Canada's imports and exports fell slightly last year to respectively C$547 billion and C$521 billion, when much uncertainty prevailed in shipping and global economic trends, but leading Canadian ports on the East Coast managed to either maintain or recover a growth pattern.

In part, this could be attributed to improving world commodity prices (impacting especially on such bulk-dominant ports as Sept-Iles and Quebec). Otherwise, sustained demand from Asia and signs of more life from lackluster Europe stimulated port activity.

And a surprise element has come from the Canadian economy which has tended to lag behind the United States in GDP performance.

Latest figures from Statistics Canada show the Canadian economy progressing at an annualized rate of 2.3 percent in January. This continues the rapid pace recorded in Q4 2016 when GDP expanded by 2.6 percent. "Given the rip-roaring start to the quarter and the nice hand-off from late last year, even tiny gains in the next two months will yield quarterly growth of well over three percent," commented BMO economist Doug Porter.

Port of Montreal Leading the Upswing

The Port of Montreal, Canada's second biggest port after Vancouver, continued its upward momentum in 2016, with an increase of 10 percent sparking a new record for total cargo at 35.2 million metric tons. Substantial increases in grain shipments and liquid bulk boosted overall throughput.

The Port of Montreal also came very close in 2016 to matching its container summit of nearly 1.5 million TEU set in 2015.

"Our traffic is pretty balanced between imports and exports," Tony Boemi, VP Growth and Development, told the *American Journal of Transportation*.

While Europe is the traditional core market, with three of every five containers imported, Asia, led by China, is a fast-growing trading partner, Boemi indicated.

Thanks to its deep inland location on the St. Lawrence River in relation to the industrial heartland of North America and its extensive intermodal connections, Mr. Boemi said Montreal was well-positioned for ocean carriers serving markets in Eastern Canada and the US Midwest.

According to Boemi, Montreal's market share of the North Atlantic container trade is estimated at 29 percent versus about 30 percent for NY/NJ and 26 percent for Norfolk.

Among the highlights of last year was the inauguration of the new Viau terminal which is increasing the port's capacity by 600,000 TEU to 2.1 million TEU.

Halifax on the Move

At the Port of Halifax, a number of positive factors have come together over the past 18 months, including completion of deepening of

(*PATTERNS – continued on page 4*)

The MSC Gina docked at the Port of Montreal

Rivalry heating up for Nova Scotia mega box terminal

By Leo Ryan, AJOT

With carrier consolidations and alliances heralding still-larger containerships coming to the East Coast of North America, the Port of Halifax has entered the fray in a serious way amidst rival bids in recent years for a mega terminal in Nova Scotia.

Since late last year, the port operating at half-capacity with box throughput of under 500,000 TEU has embarked on the elaboration of a master plan with a 10-year time frame aimed at preparing for the anticipated arrival of vessels in the over-10,000 TEU category. The port has been working with partners, including CN Railway and the Halifax Regional Municipality, to identify alternative means of reducing the volume of container truck traffic in downtown Halifax. Adding to the urgency of the exercise have been the efforts of such East Coast ports as NY/NJ, Savannah and Norfolk to be ready for the behemoth box ships.

Master Plan

"Hopefully, our master plan will be released within a matter of months following the discussions with the primary port users," Lane Farguson, spokesperson for the Halifax Port Authority, told the *American Journal of Transportation*. "A key objective would be a terminal capable of handling two mega containerships simultaneously."

Such a terminal would cost more than $1 billion, would likely receive substantial government funding support, and possibly involve a merger of Halifax's two existing operators, Halterm and Ceres, analysts say. Its eventual location remains to be determined, but it would very likely avert shipping passages under either of the harbor's two bridges.

Consultant Study Favors Halifax Support

Interestingly enough, a few months ago, a study commissioned by Nova Scotia's Department of Transportation and the Atlantic Provinces Opportunities Agency(ACOA) concludes that the provincial government should focus on enhancing the competitiveness of the Port of Halifax rather than private-sector proposals for Novaporte at Sydney and

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

The 9365-TEU *CGM CMA Tage* is the largest vessel to have called at Halterm terminal the Port of Halifax. (Photo: Steve Farmer)

*(**PATTERNS** – continued from page 2)*

channels to accommodate large containerships and the introduction of new services by members of The Alliance and Ocean Alliance consortiums. Most recently, this past January, Tropical Shipping shifted its port operations from Saint John to Halifax.

Final figures for 2016 show total Halifax traffic spiking by 16.2 percent to 8.3 million metric tons. Container cargo increased by 15 percent to 481,000 TEU. Port officials are optimistic the growth trend will continue this year as box ships in the 9,000-TEU category now call regularly.

Saint John in 'transition phase'

In New Brunswick, at Canada's third largest port by volume, total traffic at Port Saint John on the Bay of Fundy

The Port of Halifax, Nova Scotia (photo by Steve Farmer)

increased by 2,419 metric tons in 2016 when compared to the previous year, with overall cargo handled at 26.4 million tons. Its most recent peak was over 31 million tons in 2011. The local Irving refinery complex alone accounts for more than 25 million tons.

Losses experienced in the dry bulk sector were buoyed by increases in liquid bulk while break bulk forest projects showed a small gain of 1,200 metric tons. In the container sector, 572,181 tons (90,262 TEUS) of cargo were handled in 2016, a slight decrease over the previous year.

"We are in a transitional phase in the next steps of modernizing this Port," explains Jim Quinn, President & CEO of Port Saint John. "As we start 2017, we are particularly excited that our new partner DP World Saint John is now in operation. This partnership blends their global reach and influence together with our terminal modernization plan to achieve the common objective of continued growth and a bright future for the Port and its supporting port service community."

The port's C$205 million modernization project passed a major milestone in January when two recently-delivered post-Panamax cranes began operations at the DP World terminal. The infrastructure project notably enhancing capacity to handle larger vessels has a

*(**PATTERNS** – continued on page 12)*

The future of container shipping may be smaller than we think

In a post-commoditization era, niche ports will emerge as value differentiators.

By Michael Vanderbeek, Deputy Port Director for Massport, Port of Boston

The term "economies of scale" is so ubiquitous in container shipping today that its perceived merits are virtually axiomatic. Vessels are getting larger to support greater economies of scale. Ocean carriers are consolidating and collaborating in unprecedented ways in pursuit of greater economies of scale. Ports too are expanding and collaborating as never before in order to achieve, what else, greater economies of scale.

The logic behind this emphasis on scale is compelling in today's industry. Rates are low, growth is tepid and lots of capital has already been spent both on water and on land. So the reduction of operating costs through rationalization of existing assets makes sense for container shipping just as it has proven to make sense for other industries. Yet the question remains: how long can the industry stay afloat simply by focusing on the cost side of the equation? Scale, while helpful, is not a panacea and at some point ocean carriers and ports alike will need to differentiate themselves from their competitors on criteria other than available capacity and rock-bottom rates.

Show Customers What They Want

Steve Jobs famously said of consumer electronics that people don't know what they want until you show it to them. This may apply in equal measure to container shipping. It is currently difficult to imagine a return to the days in which ocean carriers offer different products at different price points, selectively pursuing shippers that fit their respective service delivery models and leaving those that don't to find other dance partners. The current landscape is simply too competitive and there are too many slots that need filling. But scale must ultimately result in value creation, not just cost reduction, to resolve the industry's stubbornly persistent woes, and service must ultimately trump scale as a means of creating that value.

It would be difficult to argue that the current trend toward scale at all levels has changed the container shipping industry for the better. Ocean carriers are less profitable, large load-center ports are more congested, roads and highways are more crowded, and shippers are less satisfied. Yet the next few years portend a doubling down on the current "bigger is better" strategy, even though it seems highly unlikely that doing more of what already is not working will make things better. Perhaps it is time to learn from other industries and rethink scale in terms of networks rather than nodes, and value rather than cost. Perhaps it is time to show customers what they want rather than hope they learn to want what they are being shown.

You Can Get There From Here

Like ocean carriers, air carriers have pursued network scale relentlessly for years using global alliances and industry consolidation as means to increase efficiency and reduce operating costs. Unlike ocean carriers, air carriers have managed capacity effectively, focusing on network scale rather than individual aircraft scale.

According to the US Department of Transportation's Bureau of Transportation Statistics, from 2000-2014, the average seat capacity of the total US commercial

*(**SMALLER** – continued on page 12)*

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Port of Davisville - question 5 answers the question about the Port's future

By George Lauriat, AJOT

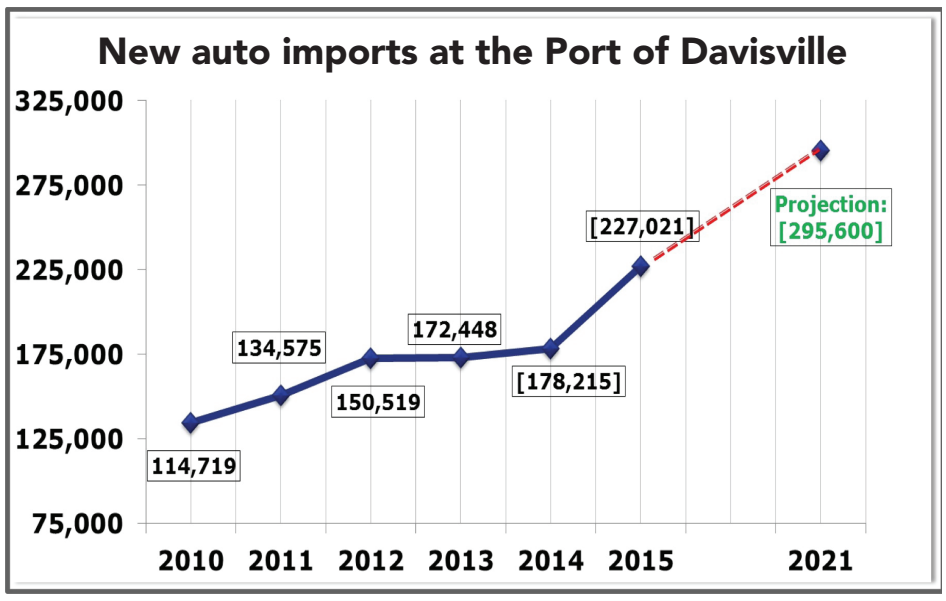
Question Answered. In November 2016, Rhode Island voters approved "Question 5", a $50 million bond measure for infrastructure projects at the Port of Davisville.

With *the Question* overwhelmingly answered, the biggest, small port in the US can now implement the critical $90 million modernization plan for Pier 2.

The Port of Davisville is part of the Quonset Development Corp's (QDC) Quonset Business Park development. The QDC is a quasi-state agency – a "Special Purpose" subsidiary of the Rhode Island Department of Commerce.

To put the success in perspective, when the port began auto imports in 1996, it handled just over 35,000 and really didn't crack the 40,000-unit barrier until 2003. However, the rise has been spectacular since the recession in 2009 and although there was a slight dip in 2016 compared to 2015, that was due to winter diversions to Davisville from other ports, not inherent business.

Besides the Bond Question and Pier 2 mentioned above, there has been significant recent investment made in the facilities. Back in June 2016, the port announced an investment of $1.25 million in paving and stripping Terminal 5, which covers over 13-acres, to



The Port of Davisville is a unique success story. While it is expected that mega-ports like the Port of New York/New Jersey or the San Pedro ports of Long Beach and Los Angeles would occupy the top rung in many port-related categories, the Port of Davisville is in the top ten in vehicle handling in the US. With the bond question settled, the port is in position to continue rising up the ranks. In 2016, a record breaking 214,350 vehicles arrived by sea and another 40,870 by rail and truck. NORAD, the port's auto processor, handled 258,740 vehicles and another 305 metric tons of project cargo (principally wind) in 2016.

provide more capacity and operational flexibility, particularly on days when two ships are in port. Another port investment was to support a project that involved installing new marine hardware to allow the port to more fully utilize Terminals 4 and 5.

Shortly after the November bond bill vote, the Port of Davisville made a change at the top with the appointment of Robert Blackburn as the new port director on December 13, 2016. Blackburn served the Philadelphia Regional Port Authority in a variety of positions over a 23-year period, most recently, as Senior Deputy Executive Director. Among his many roles, he was responsible for the re-devel-

opment of the ro/ro auto import business in Philadelphia, a background that suits his current role and position in Davisville. From a port strategy perspective, Blackburn said in a telephone interview with the *AJOT*, "We want to continue steady growth in our core business, the automobiles, while intelligently diversifying our portfolio while taking care of our park tenants."

Pier 2 and the Port's Future

More than any other single project, Pier 2 is central to the modernization plan for the Port of Davisville. Pier 2 is an earth filled cofferdam cell structure built by the US Navy in 1956. It was designed to last 50 years, a period that has come and gone. The pier is the primary facility in the Port of Davisville and due to its style of construction [earth filled rather than timber supported], it is the pier best suited to handling heavy "deck" project cargo. In addition, the pier is the easiest to expand into another berth allowing multiple vessels to berth simultaneously. The proposed redevelopment would add another 50 years of life to the pier, as well as adding another berth. However, as Blackburn explained, "adding another 50 years of functional life to the pier [Pier 2] while not interfering with our commerce, is a challenge because we are so busy." Blackburn also pointed out the other berth is important as it would enable the Port to handle Pure Car Carriers (PCC). Currently the berth is used for barges and project work.

There is substantial engineering required to bring the pier in line with the anticipated demands – particularly with the wind turbine business.

The proposed solution for Pier 2 is to "install a new HZ style wall with grouted earth anchors drilled into the existing pier backfill. This will create "dead man" tie backs to anchor the wall, supporting the exposed height and earth pressure," according to the published plan for modernization.

*(**ANSWERS** – continued on page 10)*

CPA launches new chapter for Connecticut's ports

The launch of Connecticut Port Authority (CPA) looks to open up new opportunities for the State's ports.

By George Lauriat, AJOT

Getting off the Ground

Back in June of 2014, Connecticut's Governor Dannel P. Malloy signed PA 14-222, which led to the establishment of Connecticut Port Authority (CPA) in 2015. Prior to the formation of the CPA, the State's ports were under the Connecticut Department of Transportation, although the actual running of the ports was under the various local port authorities, such as Bridgeport, New London and New Haven, the main three.

Establishing just how the CPA was to be managed and ratcheting down the new organization's "mission statement" took a little time. In September of last year (2016), the CPA hired Evan Matthews as their first executive director. Matthews was well known, as he'd spent 13 years at the Port of Davisville in Rhode Island overseeing a period of great expansion at that port *(see story on page 6)*.

Although Matthews has great experience with the challenges of ports on New England's "south coast", the new role at the CPA in many respects is very different.

In an interview with the *AJOT*, he explained that the quasi-state agency CPA "is more like a state economic development corporation" than a state port authority. Matthews elaborated that the main responsibilities for the CPA are marketing the State's ports, pursuing federal and state funding for dredging and coordinating, planning and implementing capital projects. "We're [CPA] facilitators" rather than managers, Matthews added. As before, the port management still resides with the local authorities with several notable differences. In the past, the ports and harbors (there are also a number of smaller facilities under the CPA umbrella) were just one group of many vying for a slice of the DOT budget and time. The CPA, on the other hand, has its own resources. For example, the CPA has $7.5 million for the SHIPP (Small Harbor Improvement Projects Program) directed at helping smaller harbors that in the past might have had difficulty in securing funding.

The ability to tap into State's bonds is also clearly an advantage to the CPA's ability to collaborate on projects. In February, the Bond Commission approved $4.5 million for the New London State Pier Facility project.

Deepwater Ports

Sometimes the economic contributions of three major Connecticut deepwater ports, Bridgeport, New London and New Haven, get overlooked with the Port of New York/New Jersey literally just down the road, and Massport's Conley Terminal to the Northeast, and Rhode Island's Davisville nearby.

Nevertheless, 11.4 million tons of freight annually run through Connecticut's ports with another 4.6 million in freight connected to regional railways. In fact, in many respects because of the central location, the State's ports like New London and New Haven function like the "break bulk ports" for the Port of New York, New Jersey or even the Port of Boston.

For example, the Port of New London handles cargoes (Logistec acting as stevedore and operational port manager) such as salt, lumber, paper, copper and steel. Because of a solid construction, the pier's able to handle heavy freight and with on dock rail and an interstate close to the facility, shifting the loads for destination is far easier than many more congested ports. The facility also has a significant amount of under-cover warehouse space to enable the handling of weather sensitive freight like steel coils or paper. Salt is also a major import to the facility, recently coming to the Port from Egypt. The salt is then treated on site to enhance its qualities for cold weather applications and sold regionally for use on roads.

Future for Connecticut Ports

The creation of the CPA represents an important first step in a larger collaboration of port interests in Connecticut. The CPA represents an opportunity to leverage the assets of all three deep water ports to betterment of the collective whole. The chance to pursue more break bulk and project cargo requires an investment that would be beyond any individual metro-port authority but well within the reach of the State's financial and political power.

While being a quasi-state entity helps establish the CPA in the role as a "project" leader for big picture initiatives and opens up a wealth of opportunities for private fund collaboration.

While break bulk and energy related cargo are well established, there is an opportunity to re-establish a perishable import and export sector (the region was once a major import destination for South American bananas and fruit). Another sector that holds promise is offshore wind. If this industry catches hold in the Northeast, as many analysts predict, then the ports in Connecticut will be well placed to serve this emerging sector. Even the possibility of a cruise ship business is on the table.

There are already initiatives underway that could have long term impacts to the State's ports and economy. Among them is a feasibility study for the deepening of the Port of New Haven which has been submitted to the US Army Corps (USACE) during its public comment period.

These are early days for the CPA, as Matthews noted saying it "was a work in progress." It is a vast number of miles the new executive director travels each week to build the network of port related assets into a whole, but the timing couldn't be better and the real payoff may not be that far down the road.

CVS Health supply chain's vigor relies on critical link

It's only fitting that the man responsible for leading CVS Health Inc's supply chain team happens to be named Link.

As senior vice president of logistics and supply chain at CVS Health, Ron Link views connectivity and collaboration as critical to the health of the Woonsocket, Rhode Island-based company, which has 9,762 retail locations in 49 states (all but Wyoming), the District of Columbia, Puerto Rico and, via an independent operation, Brazil.

Industry Profile

By Paul Scott Abbott, AJOT

As senior vice president of logistics and supply chain at Woonsocket, RI-based CVS Health, Ron Link oversees a network encompassing nearly 10,000 retail locations.

As part of his responsibilities, Link ensures that the company deploys leading-edge technology, advanced analytics and a hybrid of private fleet and third-party logistics operations to help get the job done.

A graduate of Edinboro University of Pennsylvania, Link spent 11 years as operations manager at Wakefern Food Corp., supplier of ShopRite stores and other supermarkets, prior to joining CVS in 1994 as director of distribution operations. He then served 11 years as vice president of logistics prior to taking on greater responsibility for the past nine years as the company's senior vice president of logistics and supply chain.

In advance of the Coalition of New England Companies for Trade's 21st annual CONECT Northeast Trade & Transportation Conference, April 11-13 in Newport, Rhode Island, Link shared thoughts on business and family with the *American Journal of Transportation*.

How has your company's supply chain evolved since 1994, when you joined the regional chain then known simply as CVS, to today's CVS Health, a pharmacy innovation company with more than 9,700 retail locations?

When I started with the company, we had three distribution centers that serviced the Northeast, which was our primary territory. Shortly thereafter, the company began to grow aggressively.

Currently, we have 18 distribution locations, and we've broken ground on a 19th, in Kansas City, Missouri, which is scheduled to be operational in the third quarter of 2018. The new DC provides us with a very strong distribution point right in the middle of the country to service our current stores there.

The supply chain has needed to keep pace with the company's growth. I've always been very, very proud of our infrastructure, our capabilities and the investments we have made in our assets, technology and people.

Just as we've grown in scale, we've also grown in complexity. We've been able to build a great team, which plays an integral role at CVS. And it's really become one of the strengths of our company and our supply chain organization. We have many talented people whom we have hired or come aboard through acquisitions, and many have grown into roles of increasing responsibility.

Do you see technology continuing to play an increasing role in the supply chain?

Absolutely. We need to have both the right people and the right technologies. You need to be in that mode of constantly evaluating what makes the best sense for your business.

The way I look at it is defined as point-of-use solutions – solutions that will provide optimal benefit for the segments of our business.

Another piece that comes into play a lot is the use of more advanced analytics, having better tools and insights to analyze data and be in a better position to forecast and project outcomes. It puts us in a far better position to align and ensure – whether it's from a capacity planning or a pure forward-looking operational view – that we have all the right pieces in play.

Can you please provide a bit of detail regarding your strategy of distribution campuses served by company fleet trucks as well as third-party logistics operators – I believe including Ryder, Penske and M&M Transport?

That has been our strategy for a number of years. For me, the value proposition associated with this blended approach achieves a couple of things.

First of all, in the locations where we have our private fleet operations, we have a lot of tenured drivers who

(**PROFILE** – *continued on page 9*)

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

are very knowledgeable, and we have very, very low turnover. The quality of the service there is extremely, extremely high.

When you're dealing with a transportation industry environment with driver shortages and sourcing of drivers in general, it's becoming more and more challenging. So we've had a high degree of success with the private fleets that we've had in play as part of our operating model.

That being said, we also have third-party operations. These have come into play because many of the facilities where we have our 3PLs tend to be larger or more complex at times. With those operations, having a 3PL affords us the ability to have more flexibility in the 3PLs' ability to scale and adapt to some of the business changes, so it's a lot more effective for us.

I also do like the fact that, when you have a blend like this, from a business point of view, it keeps you in the mix as far as understanding the business at large. When you're managing private fleets and have people who are subject matter experts, you are truly knowledgeable of industry trends. It keeps you close to the transportation business and ensures that it doesn't become something where you're totally dependent on a 3PL to make decisions for you.

How does the supply chain piece having a seat at the table in development of broad company strategies prove beneficial?

It's really critical, and it's an absolute requirement to have that as part of our company's operations.

In the supply chain, you think about everything from sourcing of products to servicing our customers in our stores. Essentially, the vast majority of companies' strategies in one way or another is going to touch or impact the supply chain. So it's critical for us.

We are at the table. We're always actively engaged and partnering with all of our business partners to look at ways to drive better value, ensure that we're doing the right thing for our customers, doing the right thing for our stores, not only from a standpoint of service but also providing input around what is the best way or most effective way to do things from a supply chain perspective.

How important is collaboration in running an optimally efficient supply chain?

It's critical. Without collaboration, there's no way to really be effective in doing the work that we do, especially when you think of it in relationship to our supplier partners.

The value of that collaborative partnership is being able to jointly look at ways to drive incremental value, to drive incremental sales, to take cost out of the supply chain, to ensure that we're optimizing bill rate and service to our stores. That's critical from an alignment point of view.

And then you've got that same level of collaboration that takes place from within the company, with all the business units.

But the supplier component of the collaboration is absolutely critical.

Have you ever thought about the interesting coincidence of your having a surname of Link and your having forged a long supply chain career?

I've never really thought about it a lot. It sort of comes up from time to time, but I never honestly really gave it a lot of thought. It's interesting that you brought it up.

I've been fortunate to have a career in the supply chain. It's sort of in my DNA. My father was a plant engineer [in Secaucus, New Jersey, with Christian Salvesen, now part of Norbert Dentressangle], and my grandfather worked in a distribution facility for Kuehne + Nagel.

Working with my dad in my earlier years, through high school and college, being at the plant he worked at, really sparked my interest in pursuing this as a career.

I've really been fortunate to be involved with really good companies and doing the work I'm doing.

Where and how did you develop your proficiency in the German language?

My parents are German. They came over to the United States in 1957. I was born in Washington, D.C.

They still speak German and are obviously very proficient in speaking English, but I would have to say that, in my early childhood, German probably was the first language I learned, and it is a requirement if you want to interact with your relatives abroad.

Does it ever come in handy in your work?

It has. We have some strategic business partners with a company like [automated picking solutions provider] WITRON, which is a German company, so it does come in handy. When they come here or when I've had to travel to Germany, it obviously does help. I understand it better than I can speak it, but, if I had to get into the zone, I probably could pick up on it pretty quick.

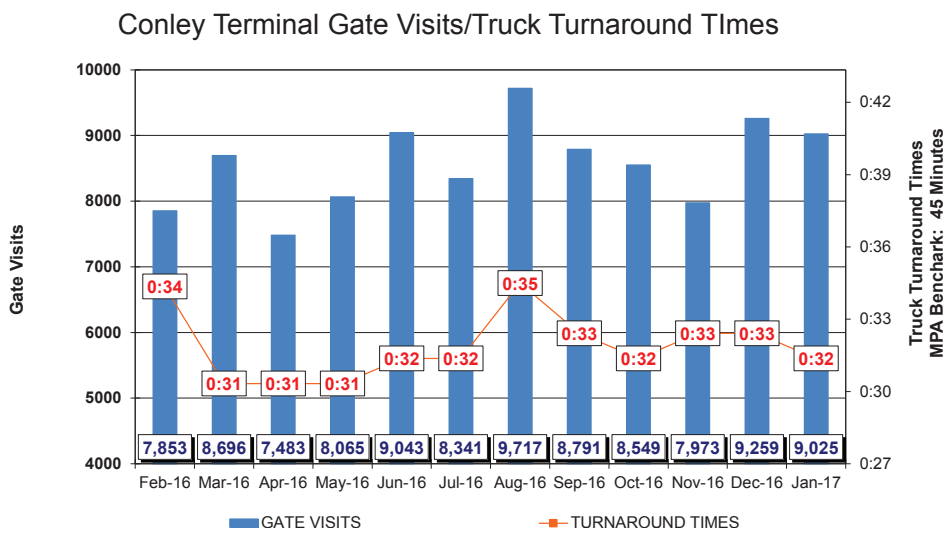
What non-work interests do you enjoy?

I really enjoy spending time with my family. I've got a great family. I've got three boys. Two of them are married, and the other son is in a real strong relationship. I really feel blessed with my kids and my daughters-in-law and my wife and the rest of my family and the support system I've had with them over the years.

I enjoy quality time fishing with my boys and going and playing golf. With the three boys, we've got a natural foursome there.

Aha, the Links on the links... Does that ever get tense?

Yeah, sometimes it does. There's always what I would call that spirit of competition that comes into play, but it's always a lot of fun. For us, it's about being able to spend quality time together – and that's what it's all about right? *Jawohl mein freund!*



A gate visit is defined as a truck entering Conley Terminal to pickup and/or deliver a load. One visit may result in multiple transactions.

*(**BOSTON** – continued from page 1)*
region. But what the Port of Boston is, or more properly has become, is very special. To understand what the Port is now, it is necessary to take a few steps back in time.

While the Port of Boston is not a mega-port in the same sense of the Port of New York/New Jersey, it is nevertheless the "Hub" for greater New England – an area including parts of upper-state New York and Canada south of the St. Lawrence River. This is not to say other ports like Portsmouth, NH; Portland, Maine; Davisville, Rhode Island and the Connecticut ports of New London, New Haven and Bridgeport, aren't important to freight movement but rather the Port of Boston is the region's principle container port – and is more than holding its own against competition throughout the East Coast.

This wasn't always the case. It was an uphill fight for market share. It was often remarked that New England's real port was New York/New Jersey. Trucks shuttled boxes to and from New York/New Jersey, along with containerized barge services (services now gone – but the concept is still alive and under study).

The situation began to turn when Conley Terminal, the terminal facility closest to the sea, was designated as the port's "container" operation.

By concentrating all the efforts on the one terminal – the terminal closest to the sea - the port's prospects began to improve and a new vision began to emerge.

However, there were and are a number of obstacles to achieving the vision of a regional "hub" albeit niche port *(see Michael Vanderbeek -The future of container shipping may be smaller than we think)*.

Back in June 2014, the then President Obama signed the Water

*(**BOSTON** – continued on page 11)*

*(**ANSWERS** – continued from page 6)*

According to reports, the total cost of redeveloping Pier 2 is around $90 million and will include the creation of a third berth, some dredging, and installing new sheet pile around the entire 16-acre earth filled wharf.

Of the total investment, $25 million will come from the revenue bond repaid entirely by the QDC via port users, $50 million from the general obligation bond, and $15 million from appropriation from the State's Capital Plan Fund, according to QDC.

Wind & Sea

The modernization is also vital to the wind power business, especially offshore. The port has already played an important role in the development of Deepwater Wind's Block Island Project. Various pieces of the project arrived via Quonset, including the steel jackets and more than 28 miles of cable. In addition, Quonset served as the principal port for the project's heavy installation vessels over a two-year period. Not surprisingly, Quonset-based companies participated in every aspect of the project's construction.

In addition, Deepwater Wind established its own worker and equipment facility on-site at Quonset and the *Atlantic Pioneer*, the first U.S.-built crew transfer vessel (CTV) engineered specifically to service offshore wind projects is based at the port. Besides the offshore business, component parts of other land-based wind turbines now in service in Rhode Island have also come across the pier at Davisville.

From a competitive perspective, ports in the Northeast are beginning to take the potential that the offshore wind business has very seriously. For the Port of Davisville, getting a head start with Deepwater's Block Island Project could be instrumental in establishing a much larger foothold in an emerging industry.

Aerial view of the Port of Davisville, RI

(*BOSTON – continued from page 10*)
Resources Reform and Development Act (WRRDA) into law and the Port of Boston's $300 million plus Boston Harbor Dredging Project took an important step towards reality. Under the plan, the North Entrance Channel will deepen from 45 ft. to 51ft and the Main Channel from 40 ft. to 47 ft., along with two 50 ft. berths at Conley Terminal. Massport has received two significant funding sources with $107.5 million dollars in state funding to build a new berth and procure three larger cranes and another $42 million dollar Federal FASTLANE Grant to maintain and modernize the existing terminal. Overall, the potential port investment exceeds $800 million.

Cumulatively, these port infrastructure improvements remove the need for larger containerships to play the tides – thus leveling the playing field with other East Coast ports.

The Tide Turns

Historically, the main criticism with the Port of Boston (and many mid-sized) ports was that the productivity was low in comparison to larger ports. Some of these issues were a result of the nature of business. Smaller container vessels, with inherent imbalances in trade (at points in time as much as 70%-30% inbound to outbound) coupled with lower capacity equipment and a Northeast climate, made handling costs seem high vis-a-vis other Northeast container ports competing for the same business.

Once Massport made the commitment to Conley, the tide began to turn and the numbers started to climb. Consider in FY 2010, the port throughput was 173,735 TEU – not a bad year given the economic debacle of the Great Recession – but a mere six years later in FY 2016 the port throughput was a record 247,329 (2016-CY 248,391 TEU) outpacing average port growth in the East Coast, Gulf and Pacific. And there are no signs of the Port's slowing down. To be sure, this is not a New York/New Jersey mega-figure, it represents something few in the industry thought would ever happen – a 200,000 plus TEU (actually three straight years) performance.

While some of the reasons for these increased throughput numbers is purely economic opportunity – there are plenty of well-heeled consumers just a stone's throw from the terminal. For example, MSC (Mediterranean Shipping Company) arguably the largest (or second largest depending on measure) global containership operator has been calling in Boston for over 30 years, proof there is an economic draw.

At least as important as the investment is the change in strategy emphasizing terminal productivity. The biggest caveat in the argument for "economies of scale" – the mantra for all containership operators, is productivity. Nearly all mega-metro ports like the Port of New York/New Jersey or LA/Long Beach, while having enormous advantages in scale of activity, have on and off-terminal productivity issues. Simply put, traffic congestion slows truck turns.

The longer time spent in lines going to the terminals or waiting in traffic, the lower the productivity in the bigger sense. In the Northeast case, it is difficult to turn trucks between Boston and the Port of NY/NJ in a day. In Conley's case, the truck terminal turn-around time generally averages just over 32 minutes (see chart Mar. 16/Feb. 17) - a highly competitive turn time.

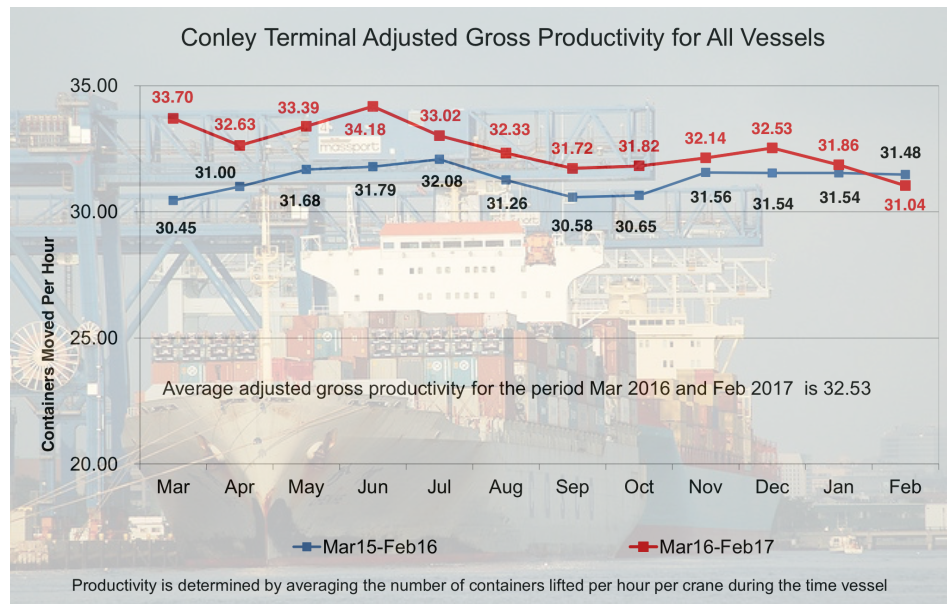
A second element of the emphasis on productivity is gantry cranes. Massport and the International Longshoremen's Association (ILA) agreed to an innovative union contract based on crane productivity. The deal has produced results.

During the period Mar. 16-Feb. 17 (see chart) the lowest monthly average per crane lift/per hour was just over 31 in February 2017. This per crane productivity ranks very high, particularly considered with the weather, number of moves and size of vessels.

Without a shift in strategy and investment in the facilities and infrastructure (see above), it's unlikely the Port of Boston would have grown or would be in the position to grow.

Future-Port

The Port of Boston is in line for another 200,000 plus TEU year in 2017. A number which begs the question of potential. Some boxship analysts believe that the port has the potential, without significant changes in the current footprint (the 100-acre terminal site has land immediate adjacent for expansion), to be a half million TEU port. Right now, the Port is on a statistical pace to be well over 400,000 before 2030. This estimate is probably low as it doesn't take into account the changes in ship sizes and services.



Almost exactly a year ago, the Port of Boston handled its first 8,500 TEU vessel, an important test for the future of the port. Now virtually all the Asia trade vessels are 8,500-8900 TEU vessels and most calls are ships in excess of 6,000 TEUs.

The Port already has calls from the 2M (MSC/Maersk) and in April is adding new Asia services operated by

(*BOSTON – continued on page 12*)

(*SMALLER – continued from page 5*)
aviation operating fleet increased just 4% compared to an increase in average TEU capacity for the combined fleets of Alphaliner's top 20 global ocean carriers of 28% during the same period. This "right sizing" of hardware to match market size has allowed U.S. air carriers to continue to compete in markets of different sizes while achieving a 15% increase in total system load factors, a 4% improvement in on-time arrivals and overall net income in 2014 that was more than two and a half times what it was in 2000 – all despite a decline in average U.S. domestic airfares of 16% during the same 15-year span. You may get pretzels now rather than meal service, but from both a cost and yield perspective, the airline industry has figured out how to use scale to its advantage, not by cascading larger and larger aircraft into fewer and fewer markets, but by increasing the number of markets served and actively managing the size and frequency of aircraft deployed in those markets so as to balance supply and demand. The container shipping industry should learn from this.

A Role for Niche Ports

Increasingly, activity at large U.S. ports is characterized by higher volumes of inbound non-local cargo whose final destination may be hundreds of miles away, sometimes even in another port city. This trend is predicted to intensify in coming years in conjunction not only with the continued deployment of larger container ships in both east-west and north-south trades, but with the perceived inevitability of service consolidation that is expected to follow the current round of ocean carrier merger and acquisition activity and alliance reshuffling. The theory goes that ocean carriers' path to profitability lies in replacing 30 ships of capacity 5X deployed on three separate services with 20 ships of capacity 7.5X deployed on two services. By deploying larger ships to fewer ports the operating costs associated with those 10 extra ships could be eliminated while sustaining similar overall capacity in the trade.

The problem with this strategy from a shipper perspective is that rather than offer more options and more flexibility it offers fewer options and less flexibility. Worse still, rather than distributing millions of containers across multiple gateways so as to minimize choke points and mitigate risks associated with single-point failures, the funneling of more cargo through fewer gateways leads to highly localized congestion, equipment imbalances, and stress on other resources, all of which have downstream and upstream impacts not just on shippers, but on the entire supply chain as well as the general public. In effect, rather than eliminate cost this strategy at best shifts cost from the waterside to the landside, and at worst adds cost as a result of congestion, thereby amplifying not just logistics challenges but environmental challenges and community tension as well. According to a July, 2015 report released by the Federal Maritime Commission (FMC) "…the elimination of congestion is today's most critical and relevant trade-related issue." In light of this it is hard to imagine how acceleration of deployment of larger ships to fewer ports could have a positive impact on container shipping.

There are viable alternatives to this approach, however. Some ocean carriers – such as MSC and COSCO in the case of the Port of Boston – have understood for many years that while it takes time and resources to build a niche market organically, there are long-term benefits to doing so, not the least of which being the ability to offer a more efficient and higher-value alternative to customers compared to the standard product being offered by competitors. Other ocean carriers would be wise to pay attention and follow suit and indeed some are doing just that.

Deploying larger vessels and concentrating more cargo in fewer ports may reduce vessel operating costs, but it also weakens ocean carrier pricing power by effectively commoditizing containers. It is the equivalent of substituting station-to-station bus service for door-to-door car service. There is a market for bus service, but that does not make it optimal. Nor does it mean that buses should be the only mode of transportation available to customers. The market requires and demands alternative service delivery models.

(*SMALLER – continued on page 17*)

(*PATTERNS – continued from page 4*)
2021 completion target.

At the Port of Sept-Iles on the North Shore of the St. Lawrence River, Pierre Gagnon, President and CEO, sees an improved outlook on the horizon thanks to a recent strengthening of global iron prices and several acquisitions that, among other things, give the port greater control over the strategic Pointe Noire area.

Of considerable significance, too, is the exploitation of a multi-user dock now slated for formal inauguration this coming summer. Built at a cost of more than C$220 million, it will more than double the port's iron ore capacity to 50 million tons. Conceived to handle Chinamax bulk carriers, the port is counting on handling iron ore for overseas shipment to Tata Steel later this year.

"We see prospects in 2017 as generally more favorable," Gagnon said.

In 2016, there were already signs of a turnaround in the wake of a downward trend lasting several years, as total traffic rose by 1 percent to 23 million metric tons.

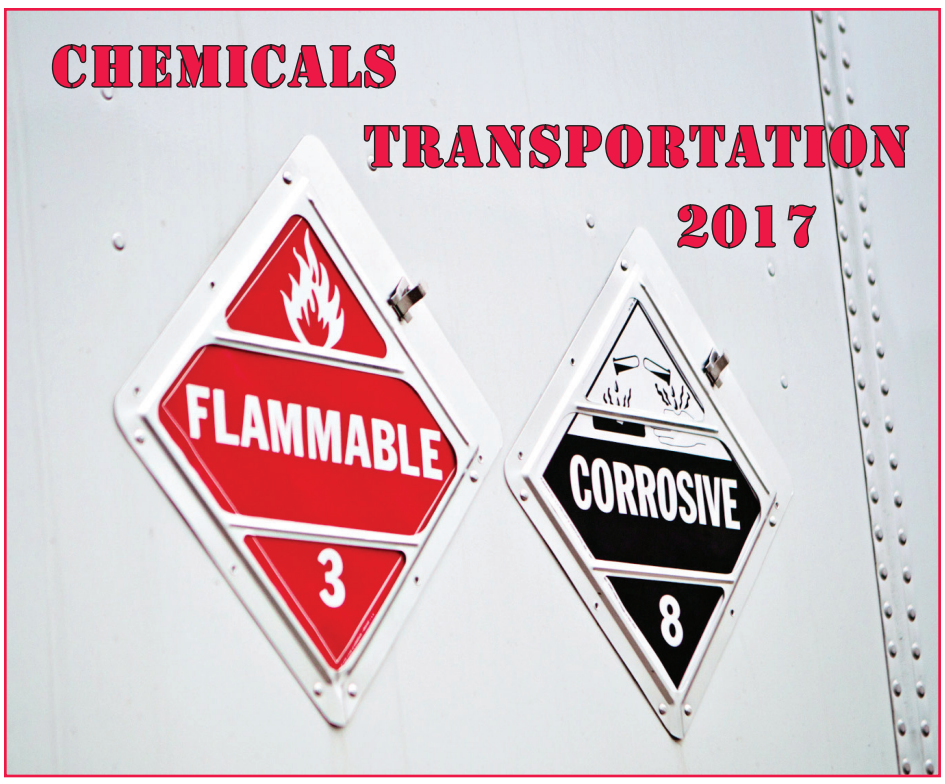
At the Port of Quebec, last year also marked a return to cargo growth, with cautious optimism prevailing for 2017. Following three years of decline, traffic increased by 15 percent in 2016 to 23 million metric tons, reflecting in part a higher demand for commodities.

• •

(*BOSTON – continued from page 11*)
the Ocean Alliance (CMA CGM, and its recently acquired American President Line (APL), Orient Overseas Container Line (OOCL), Evergreen and COSCO Shipping) and THE Alliance (Mitsui O.S.K. Lines, Nippon Yusen Kabushiki Kaisha (NYK Line) and Kawasaki Kisen Kaisha ("K" Line), Hapag-Lloyd, United Arab Shipping Company (UASC) and Yang Ming Transport. The three Japanese carriers plan on combining their container operations into one company by April 1, 2018. In addition, Hapag-Lloyd and UASC are to merge later in 2017.

The combination of alliance schedules gives the Port substantial reach, as well as calls that should boost throughput.

In the long term, dredging and improvement to the existing footprint remain the key to retaining and building services.

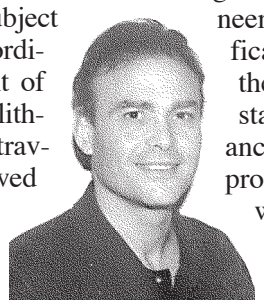


The perils of hazmats

Shippers must be proactive on compliance

By Peter Buxbaum, AJOT

The transportation of hazardous materials was once an arcane subject known to an esoteric coterie of specialists, but of late the subject has hit the radar screens of ordinary citizens with the advent of exploding smartphones and lithium ion batteries. Now, air travelers know they aren't allowed to bring certain devices on board aircraft, and air cargo movers have their own set of regulations to follow when it comes to the errant power sources.



Transportation companies and third-party logistics providers can do a lot to help shippers of hazardous materials comply with an ever-changing maze of regulations, but shippers can't expect their service providers to do all the heavy lifting. To the contrary, shippers must be intimately familiar with the regulations governing hazmats, become certified under them, and provide required training to their employees in the handling of the materials. Shippers are the ones responsible for the proper packaging and labeling of hazmats, and the regulations governing these items aren't simple.

If shippers fail to comply, the Pipeline and Hazardous Materials Agency (PHMSA) of the United States Department of Transportation will come after them and fine them, sometimes to the tune of tens of thousands of dollars for each incident. The Federal Aviation Administration, not to mention agencies of foreign governments, also have jurisdiction in enforcing hazmat regulations. (See sidebar.)

"Shippers need to know the format and structure of the regulations governing hazardous materials," said Chris McLoughlin, a risk manager at CH Robinson Worldwide. "They are very prescriptive and product specific."

That means that having a general overview of the regulatory regime won't do. "Lots of times people want to know the generalities of hazmat regulations, thinking that they're one size fits all," said McLoughlin. "But the regulations are very specific to the commodity being shipped, the quantity being shipped, and the mode of transportation--all these nuances dictate individually how the regulations are executed."

That's why it might be necessary to go so far as to sit down with engineers to review product specifications to figure out where the product and the company stands with respect to compliance. Shippers are required to provide training to employees who handle hazmats, to document that training, and to get certified by PHMSA to handle and ship hazmats. PHMSA has a website (www.phmsa.dot.gov) that covers a great deal of useful information to shippers.

The regulations also cover things like packaging and labeling, so that employees way down the pay scale will need to be trained and to exhibit knowledge of regulatory compliance as it is relevant to their job descriptions.

Some commodities defined as hazmats might come as a surprise to the shipper. It won't be a shocker to learn that solvents and cleaning fluids require special attention, but certain food ingredients are also regulated hazardous materials. "Food items that can be considered corrosive include highly acidic beverage mixes and concentrates of various products," said McLoughlin. "These can be subject to packaging and labeling requirements, among other things. Products may be considered placardable under the regulations depending on the quantities being transported."

Another important thing to understand is that the regulations are a moving target because they are constantly being revised and updated, so it's important to keep track of what's going on. One significant trend in recent years has been that PHMSA and other regulatory agencies often update regulations to harmonize them with international standards.

For example, on March 29, PHMSA issued a final rule amending the US Hazardous Material Regulations (HMR) with respect to shipping names, hazard classes, packing groups, packaging, air transport quantity limitations, and vessel stowage requirements to maintain consistency with international regulations and standards including the International

*(**PERILS** – continued on page 14)*

Penalties for hazmat breaches

The Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Hazardous Materials Safety (OHMS) and PHMSA's Office of Chief Counsel processed 42 cases and 256 tickets in 2016, resulting in the collection of $941,404 in fines.

Shenzhen Union Trading Co. transported fireworks into and within the United States without approval and with an invalid EX number--the code issued by the Department of Transportation to identify explosives. PHMSA hit the company with a $66,537 fine.

Airsplat, of Irwindale, California, was found to have transported liquefied petroleum gases, while failing to properly label and mark the packages and to provide proper hazmat documents. PHMSA also found the company failed to provide hazmat employees with training nor to create or keep records of training. Airsplat paid a fine of $19,584.

Vet Specialist, Inc. of Quezon City, Philippines, transported calcium carbide in non-standard packaging, failed to label each package as prescribed by the International Maritime Dangerous Goods Code, and was deficient in its documentation of the shipments. PHMSA fined the company $18,039.

Amazon, which is not only a shipper but also increasingly a logistics provider, has a history of run-ins with the U.S. Federal Aviation Administration (FAA) over shipments of hazardous materials. Last June the FAA levied a $350,000 civil penalty against Amazon.com, Inc. for violating hazardous materials regulations. Between February 2013 and September 2015, Amazon was found to have violated the Hazardous Materials Regulations 24 other times.

In the United Kingdom, a case against Amazon went all the way to a jury trial. The prosecution was brought by the UK's Civil Aviation Authority, after a complaint from Royal Mail. Some offenses took place after Amazon knew it was under investigation, the prosecution contended.

The conviction was based on dangerous items being found in airmail shipments from Amazon. The items in question were laptops containing lithium batteries and aerosol cans containing flammable gas propellants. In each case, the items had been flagged by Amazon's computer systems as possibly dangerous goods, and subject to restricted shipping rules. But in each case further review by Amazon staff in China, Romania, and India led to the items being incorrectly re-designated as non-dangerous. Royal Mail stopped three of the Amazon packages from entering the airmail system while a fourth was stopped by UPS.

Royal Mail found 782 of Amazon's packages to contain dangerous goods that cannot be airmailed. Amazon's defense counsel responded to the findings by explaining that Amazon shipped over 300,000,000 packages during the same period.

Intermodal & Logistics News

New AAR report confirms freight railroads are deeply connected to international trade

The Association of American Railroads (AAR) released an assessment of trade's impact on the freight railroad industry, finding that at least 42 percent of rail carloads and intermodal units, and more than 35 percent of annual rail revenue, are directly associated with international trade.

Approximately 50,000 domestic rail jobs, accounting for more than $5.5 billion in annual wages and benefits, depend directly on international trade, the analysis of 2014 data also found. If rail traffic indirectly associated with trade was included, the figures would be notably higher.

With ample discussions in Washington policy circles today on the role of trade, imports versus exports and manufacturing, the data provide a reminder that today's global economy is firmly established and cannot be easily undone with rushed policy modifications. Doing so could have damaging and counterproductive effects on American workers and various industries - including a freight rail network that serves nearly every industrial, wholesale, retail and resource based sector of the economy.

"Efforts that curtail overall trade would threaten thousands of U.S. freight rail jobs that depend on it and limit essential railroad revenues used to modernize railroad infrastructure throughout North America," said AAR President and CEO Edward R. Hamberger. "For a highly capital-intensive industry that has spent $26 billion annually in recent years, private investment is the lifeblood of a freight rail sector that must devote massive sums to safely, efficiently and affordably deliver goods across the economy. Upending the ability of railroads to do so by undermining free trade agreements that have done far more good than harm would have far reaching effects."

The report looked at a host of rail movements, analyzing data from the 2014 Surface Transportation Board (STB) Waybill Sample - the most recent data available at the time of the analysis - other government data, information from U.S. ports and Google Earth, among others. Waybill Sample contains data from a stratified sample of waybills submitted each year by freight railroads to the STB. Each waybill contains, among other things, information on the origin and destination of the shipment and the volume and type of product moved.

The scope of operations and reach into the U.S. economy discovered through the analysis was stark. In 2014, there were 329 million tons of exports handled, nearly double the still-sizeable 171 million tons of imports moved by rail.

Rail traffic associated with trade included movements of coal for export out of ports in Maryland, Virginia, the Gulf Coast and the Great Lakes; paper and forest products imported from Canada into the Midwest, as well as paper products exported from the Southern U.S; imports and exports of Canadian and Mexican automotive products to and from auto factories in dozens of U.S. states; containers of consumer goods from Asia coming ashore in Los Angeles, Long Beach, Oakland, Tacoma, Savannah, Norfolk, and Newark;. plastics shipped by rail from Texas and Louisiana to the East and West Coasts for export to Europe and Asia; iron ore mined in Minnesota and shipped by rail to Great Lakes ports; and grain grown in the Midwest and carried by rail to the Pacific Northwest and the Gulf Coast for export.

"These numbers validate our view that U.S. policymakers should proceed with caution in their quest to reverse some impacts of globalization," added Hamberger.

*(**PERILS** – continued from page 13)*

Maritime Dangerous Goods Code, the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air, and the United Nations Recommendations on the Transport of Dangerous Goods.

In December 2016, PHMSA proposed to harmonize hazmat regulations for air transportation with international standards. The agency issued a notice of proposed rulemaking that would amend certain special provisions of the HMR with respect to packaging requirements for certain materials, quantity limits for lithium batteries carried on an aircraft by passengers for personal use, and notification requirements for pilots regarding the contents of hazardous materials onboard an aircraft.

PHMSA often gets involved in enforcement actions when there is an accident or an incident, such as a leakage of hazardous materials, but agency personnel may also just show up at industrial sites to perform inspections and audits. These examinations will include, not only observing the state of affairs with regard to the handling of hazmats, but also the required documentation that is supposed to be kept in conjunction with that. Paperwork violations could also include failing to document the training of employees. In other words, it's not enough to perform the required training, it's necessary to record for posterity that all relevant employees have completed that training.

When PHSMA finds a violation, it will fine the business in question, with penalties ranging from hundreds of dollars to thousands to tens of thousands of dollars. The biggest fine handed out by PHMSA in 2016 was over $66,000; in 2015, it was $50,000. Hundreds of US businesses are fined each year by PHMSA. Other agencies, like the FAA, are also in the business of penalizing non-compliant entities, and their fines can be much more egregious. *(See sidebar on page 13)*.

Logistics providers can help shippers in the compliance process, first and foremost, by qualifying transportation providers capable of complying with the regulatory requirements. Of course, since hazmat handling is such a specialized field, it's also important to choose a 3PL with good hazmat competencies. Also, as McLoughlin pointed out, 3PLs can't be on the loading dock to make sure that operations are running compliantly, but they can and should review paperwork to make sure that the hazard class is properly noted and that the documentation is otherwise in order.

"PHMSA takes it job seriously," said McLoughlin. "It's all about ensuring that products are not being released that pose a significant risk to individuals or property. And besides the fines, you really don't want to be in involved in an environmental cleanup."

CN and TFI International reach framework agreement to create best in class intermodal service

CN and TFI International, Inc. have announced a renewed collaboration to grow domestic intermodal business in markets across Canada.

The renewed long-term partnership aligns Canada's largest railroad, with its transcontinental rail network that reaches the Pacific, Atlantic and Gulf coasts, and Canada's largest trucking company and logistics leader, with a range of services, including truckload, less-than-truckload.

"Over the last five years, TFI International has grown its operating divisions' presence in the domestic intermodal market and its companies have a combined 100 years of collaboration with CN," said JJ Ruest, CN executive vice-president and chief marketing officer.

Rail industry sets new safety record

U.S. railroads had the lowest train accident rate on record in 2016, according to data from the Federal Railroad Administration (FRA). Derailment rates, which declined 10 percent in 2016 from 2015, as well as track-caused accident rates, are also both all-time lows. The 2016 rail safety statistics continue a string of record-setting years, showing this period has been the safest ever for the rail sector.

The freight rail industry believes there is a strong correlation between safety gains and the research, development and implementation of new technologies, as well as sustained private spending averaging $26 billion annually in recent years.

Notable statistics, calculated per million train miles using March 2017 FRA data, include:

- Train accident rate is down 44% since 2000.
- Equipment-caused accident rate is down 34% since 2000.
- Track-caused accident rate is down 53% since 2000.
- Derailment rate is down 44% since 2000.

Recent years have been the safest in terms of employee on duty injury rates. In 2016, the employee on duty injury rate dropped by 1.8 percent relative to 2015.

(*VIEWED – continued from page 1*)
to improve under the new carrier structure, adding, "and we certainly should take advantage of that."

International Forest Products LLC's director of global transportation, Charlie Cunnion, said he does not anticipate negatives resulting from the new alliances while he expects low ocean freight rates to continue, commenting, "I think it's going to be a shippers' market for some time now."

Jim Prior, divisional vice president for transportation at luxury fashion accessory leader Coach Inc., offered a three-word summation of 2016 – "crisis, consolidation, transformational" – indicating that the new carrier alliances have potential for lifting the industry's condition from a year in which container lines suffered multibillion-dollar losses.

Elaborating from a carrier point of view, MSC's Santucci said that, whereas he expects equipment shortages to continue to pose challenges in 2017, he believes capacity imbalance issues will clear up within two to three years.

Santucci dismissed a suggestion that ocean carriers are colluding on rates, saying, "If there was any collusion, the rates wouldn't be where they are."

Indeed, MOL's Craig said, "We compete fiercely with our alliance partners."

While he said the new alliances and their mega-containerships should bring about economies of scale on the water, Santucci said supply chain efficiencies won't be realized without marine terminals instituting measures such as night opening of gates and trucker appointment systems.

Craig cited MOL's extensive investments in automation at terminals in Oakland and Southern California, remarking, "We're not just going to dump a big pile of cargo in there and overwhelm them."

Not surprisingly, another JAXPORT conference panel discussion – on the outlook for Caribbean trade – focused on commerce with Puerto Rico, for which the Port of Jacksonville has provided the dominant mainland link for decades.

Wal-Mart Stores Inc.'s director of global logistics, Anthony McAuley, said actively extending his company's "Buy America" strategy to the island commonwealth should help stimulate Puerto Rican manufacturing and two-way shipping, with more raw materials heading to Puerto Rico and greater quantities of manufactured goods coming north in what traditionally has been a trade highly skewed toward southbound moves. At the same time, he said, logistics costs will be reduced for consumer goods made on the island and bought at Puerto Rican Wal-Mart stores.

"Being able to stamp 'Made in America' on your product, that's going to be worth something for at least the next four years," McAuley said, alluding to Trump administration policies hostile to imports.

Thomas B. Crowley Jr., chairman and chief executive officer, Crowley Maritime Corp., said he views manufacturing in Puerto Rico as "a huge unsung opportunity" to help fill containers that historically return northbound largely empty.

Crowley noted the extensive investments in liquefied natural gas, in new LNG-powered vessels and LNG delivery systems, being made by his company and another carrier in the Puerto Rico lane – TOTE Maritime – saying the clean-burning fuel is "the future of shipping, we believe."

That sentiment was echoed by TOTE's president and chief executive officer, Anthony Chiarello, who said, "We believe LNG will become the leading marine fuel."

Mitch Luciano, president and chief executive officer, Trailer Bridge Inc., the third carrier in the Jacksonville-San Juan lane, said his company, which provides triple-deck barge service, is in its best financial condition in its quarter century of operation and said he has "a very positive outlook" on Puerto Rico trade. He added, however, that he does not see an economic rebound on the island until 2019 or 2020.

Sergio Sandrin, president of Aqua Gulf Transport, the leading third-party logistics provider in the Puerto Rican trade, said that while that business "is still our rice and beans," he sees the Dominican Republic as a fantastic growth market. He said he would love to see direct Dominican service from Jacksonville, adding that his 3PL presently serves that market via ships from Savannah and Miami.

(*VIEWED – continued on page 19*)

Tradepoint Atlantic inks long-term license agreement with Host Terminals

Host Terminals signs an exclusive 10-year contract to act as port operator for Tradepoint Atlantic's 3,100-acre multi-purpose global logistics center - $30 million to be spent making infrastructure improvements.

Tradepoint Atlantic, a 3,100-acre multimodal global logistics center in Baltimore, Maryland, that features an unmatched combination of access to deepwater berths, railroads, highways, and storage space announced an exclusive, 10-year agreement with Host Terminals to oversee the vast majority of marine cargo operations.

As part of the announcement, $30 million in combined investment toward infrastructure improvements will also be made to the site. This will further Tradepoint Atlantic's ability to generate a projected 17,000 direct and indirect permanent jobs over the next decade as it

(*INKS – continued on page 16*)

(*RIVALRY – continued from page 4*)

Melford on the Strait of Canso. These two projects offering ample real estate space have yet to secure a long-term cargo commitment from a shipping line, although Melford at least signed an agreement with SSA Marine to operate a future facility.

"From the perspective of Nova Scotia's marine gateways, we recommend that public policies, plans and investments prioritize improvements that support the competitiveness of the Port of Halifax as Nova Scotia's and Atlantic Canada's primary marine gateway for containerized trade," says the study completed by CPCS, international infrastructure development consultants. "Certainly, we recommend against public investments in new or alternative marine gateways in Nova Scotia for container traffic."

Backers of the two private projects have argued that lower development and operating costs as well as higher productivity could attract more container business through Nova Scotia.

The study acknowledges that both projects will not have the same land-based bottlenecks facing Halifax and will also benefit from low construction costs, competitive labor agreements and the most advanced technology.

Distance to Market

However, the study notes that both projects "have the disadvantage of greater distance to inland markets than existing ports."

It also considers that Sydney's plan to deploy shortsea shipping services after the mega vessels arrive at port would create "prohibitive" costs for shippers.

It further notes that a three-port strategy diluting the current volume of Halifax would send "conflicting signals" to the shipping industry about the province's main port.

On the other hand, the study raises some red flags on the future of the Port of Halifax, including the fact that it is widely regarded as a "discretionary" port-of-call compared to Montreal and competitors on the US East Coast. Another is the lack of a large local market, so global carriers top-off their loads at Halifax before calling at much larger centers on the eastern seaboard.

However, the study says the expansion of the Suez Canal capacity means positive news for Halifax as more traffic flows to the East Coast of North America from southeast Asia.

Government Response to Study

Meanwhile, how has the Nova Scotia government reacted to the study?

There has been little in public declarations. But in a response to a query from *AJOT*, a statement from the Nova Scotia's Department of Transportation, replied in these terms: "Shipping traffic plays a key economic role for the province. This was a jointly funded report between the province and ACOA to help inform the overall discussion for Nova Scotia.

"Any major investment in NS ports would be led by the private sector. We've shared the report with stakeholders and look forward to continuing to work together to create conditions for the success in Nova Scotia in all our sectors."

Which basically suggests that the ball, or rather the boxes, are back in the courts of the Port of Halifax, Novaporte and Melford. More close monitoring in the future required before a final form of mega terminal emerges…

(*INKS – continued from page 15*)

enhances Baltimore's competitiveness as a key East Coast port for global trade.

"Tradepoint Atlantic is excited to welcome and partner with a leading expert in terminal operations," said Joe Greco, Vice President of Marine and Commercial Development. "We are in the process of expanding our marine capabilities as we invest and expand our infrastructure to attract new business to the Baltimore region with our partners. Host is a 94-year-old company that's been in Baltimore since 1986, and truly shares our overall vision for the future at Sparrows Point. They possess a unique understanding of the total supply chain, with an extensive track record of finding efficiencies and creating value."

"In my 40 years of experience in the industrial development business, Tradepoint Atlantic is one of the most exciting projects I have been part of," says Tradepoint Atlantic Chairman and interim CEO Michael Mullen. "It's the premier heavy industrial gateway of the United States, and we are eager for what the future brings as we further the growth and build-out of our port. I look forward to working with Host on maximizing the utility of this world class center."

CEO Mullen replaces Michael Moore who in March announced his retirement as CEO to enable him to attend to important family matters. He said of his retirement, "When I first came out of retirement to lead Tradepoint Atlantic, I set out to build a team and grow the commercial activity of the business. I believe I have accomplished that goal and I am proud of what we have achieved. While personal and family matters demand my attention, I am confident that Tradepoint Atlantic is well positioned for a bright and prosperous future."

Host brings expertise in transportation of non-containerized cargos, providing "REAL solutions" for the bulk and break bulk industry. Host possesses a diverse range of experience in terminal operations, stevedoring, marine asset, and ship agency work, empowering out-of-the-box strategies that transform the industry.

With four berths, over 1,000 acres dedicated to marine storage space, and connections to both CSX and Norfolk Southern, Tradepoint Atlantic is the largest maritime development in the United States. The site offers immediate access to the interstate and regional road network, and it has the largest private rail yard on the East Coast with over 100 miles of shortline rail on-site. It will be the first place in the country to push bulk cargo operations inland.

Spliethoff launches 4th year of Cleveland Europe Express

By Leo Ryan, AJOT

Dutch niche carrier Spliethoff is off and running with the 4th year of what is described as the only Great Lakes scheduled liner container and breakbulk service – the Cleveland-Europe Express (CEE), with Antwerp acting as the European hub port.

"We presently import more from Europe than we export, and the cargo mix is similar in both directions," Torin Swartout, vice-president of Spliethoff Cleveland, told the *American Journal of Transportation*.

The recent arrival of the Hemgracht at Cleveland kicked off the 2017 edition of the direct all water service. She sailed from Antwerp, Bilbao and Liverpool in mid-March with destinations of Valleyfield Quebec, Cleveland and Detroit. The Hemgracht has 2x175 ton cranes that can be combined.

Spliethoff averaged three Great Lakes sailings per month in 2015 and 2016, and kept up weekly service via the East Coast during the winter when the St. Lawrence Seaway was closed.

"As a major carrier of projects and wind power, Spliethoff had port calls in every one of the Great Lakes in 2016 and we expect to do the same this year, "Swartout said, adding: "Knowing that there are scheduled sailings in and out of the Lakes allows project shippers more flexibility with less lead time."

Container shippers enjoy a short transit time, without port or rail congestion and can pick up their cargo when they want it, Swartout said.

Later in April Spliethoff's BigLift vessel Happy River, with 800 ton lifting capacity, will be calling Cleveland and other Great Lakes ports.

The typical vessels owned by the Spliethoff Group are modern, well maintained, and have a combination of desirable features: heavy lifting capacity, top ice class, and are container friendly.

"This allows both container shippers and project shippers to utilize the CEE Service on the same vessels," said Swartout. "Industrial commodities and even bulk cargoes are carried on the service, sometimes in smaller quantities due to the frequency of sailings."

Door to door service is offered for both breakbulk and containers, with worldwide connections for heavylifts and projects via Antwerp.

In April, Spliethoff's BigLift vessel *Happy River*, with 800 ton lifting capacity, will be calling Cleveland.

*(**SMALLER** – continued from page 12)*

Uber and Lyft are good examples of the market finding a way to offer customers a product that they didn't know they wanted until they saw it. Autonomous vehicles are fast becoming another example. The barriers to entry for container shipping are obviously far higher than for urban passenger transport, so this is not a perfect analogy. However, the substituting of scale for service in almost every facet of the container shipping industry is rapidly creating a value vacuum for customers by virtue of eliminating product and service differentiation while adding both risk and cost to the overall system.

Niche ports are poised to fill this vacuum by offering ocean carriers more direct access to local customers while at the same time offering shippers more reliable alternatives to the long queues, congestion and overall poor service that increasingly characterize larger ports burdened by unmanageable lift counts and unsustainable growth patterns. The Port of Boston, for example, has attracted eight new ocean carriers just in the past two years and has set a new record for container volume each of the past three years. At the same time, the Port has consistently sustained average truck turn times, including dual transactions, of just over 30 minutes while increasing productivity by 30% since 2012. Ports that handle 10, 20 or even 30 times the volume of containers that a niche port like Boston handles can easily dismiss such statistics as irrelevant since a port that handles fewer than 300,000 TEUs per year does not have the same kinds of challenges that a large port does. But that's precisely the point – not all ports do have the same challenges and shippers are starting to understand this and reward ports that demonstrate the ability to offer superior service.

From Bigger to Better

The inherent competitive nature of people and so too of ports dictates that growth in volume and market share is almost universally considered a net positive and something to be celebrated. The flip side of this is that decline in volume/market share is considered a net negative and something to be avoided like the proverbial plague. Yet in order to resolve some of the container shipping industry's most fundamental problems, a wholesale shift away from a mentality of "or" and toward a mentality of "and" whereby it is possible to lose market share and still be successful or, conversely, to gain market share and still be unsuccessful, must eventually occur. Large intermodal gateways are critical to an efficient supply chain and will not decline in importance any time soon. But for large ports to continue to be successful, they must resolve the many challenges that have resulted from the very scale that created those challenges. While it may seem counterintuitive, in some cases the answer to the challenges that large ports face may be to concede a certain amount of local volume to niche ports within the region in order to focus on improving the quality of their core non-local intermodal business. The industry will be better served in the long-term if growth in volume and/or market share at a given port is dictated by targeted efforts to improve performance and deliver value rather than by short-term cost-cutting measures driven by the relentless pursuit of perceived economies of scale.

Ports of all sizes are acutely aware of the near-term challenges that larger vessels represent and, large or small, all ports must continue to make the necessary capital investments, including both dredging and landside improvements, to meet those challenges. But sacrificing service in pursuit of scale is a race to the bottom, not a blueprint for future success. Cargo, like water, will always follow the path of least resistance. By focusing on service over scale, productivity over price and overall customer experience over bragging rights, niche ports eliminate many of the unintended negative consequences that economies of scale have forced upon larger ports.

The first 15 years of the 21st century have witnessed a clear shift toward commoditization in the container shipping industry as the relentless pursuit of scale at all levels has steadily eroded nearly all distinguishing attributes among service providers, particularly ocean carriers. To the extent that trends in other industries can be viewed as reliable proxies for the future of container shipping, the next 15 years can and should witness a slow but sure shift away from scale as an instrument of cost reduction and toward market and product customization as instruments of competitive advantage. Niche ports will increasingly emerge as differentiators in this environment by offering customers the one thing they most want: value.

Crowley and Penn Terminals sign multi-year agreement

Crowley Maritime Corporation has signed a multi-year stevedoring and terminal services agreement with Penn Terminals in Eddystone, Pa., to accommodate the company's weekly Northeast container shipping service to and from San Juan, Puerto Rico.

Crowley, which has served the Northeast market from Petty Island in Pennsauken, N.J., continuously since 1983, will begin service from Penn Terminals Jan. 1, 2018.

"We are very, very pleased to find a new home for our operations at Penn Terminal," said John Hourihan, Crowley senior vice president and general manager, Puerto Rico services. "The Penn Terminal management team has been very accommodating and understanding of our needs. We look forward to a long-term, mutually-beneficial relationship."

"Penn Terminals is honored to be Crowley's chosen service provider on the Delaware River come January 2018," said John Brennan, president and CEO of Penn Terminals. "We are looking forward to the opportunity to help support Crowley's growth and development over the coming years."

With Crowley's lease at Petty Island expiring at the end of this year, and the company transitioning to a lift-on/lift-off (Lo/Lo) operation in its Puerto Rico service, Hourihan said the time was right to make the move.

JAXPORT Logistics & Intermodal Conference draws 350-plus leaders

By Paul Scott Abbott, AJOT

The Jacksonville Port Authority's 2017 JAXPORT Logistics & Intermodal Conference has once again proven a big draw for senior transportation executives, attracting more than 350 to St. Augustine, Florida, for events from March 20 through 22.

The opening conference reception, sponsored by TOTE Maritime, was held March 20, at the World Golf Hall of Fame, adjacent to the World Golf Village Renaissance Resort venue that hosted the following day's business sessions. Optional JAXPORT tours and a March 22 golf tournament rounded out the agenda.

It was the fifth edition of the JAXPORT conference, which has been held in Northeast Florida on a biennial basis since 2009. (For reports on conference business sessions, see front page.) *(Photos by Paul Scott Abbott, AJOT)*

(L to R) Anita Pounds – H&M International Transportation Inc., Doug Connell – GP Cellulose LLC, Carter Noland – GP Cellulose LLC, Rich Werkmeister – H&M International, Linda Gillis – H&M International, Joan Paoletta – H&M International

(L to R) Michael Breen – JAXUSA Partnership, Greg Kern – Tetra Tech Inc., Tyler Newman – Cushman & Wakefield, Robert Hooper Jr. – Atlantic Logistics, Tim Hart – CSX Transportation, Debbie McDowell – Seaonus

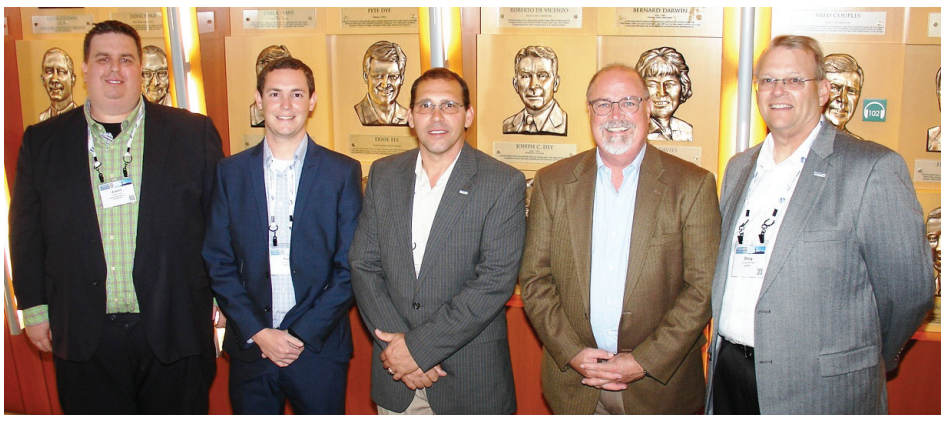
(L to R) Chris Sloope – North Florida Warehouse FTZ, Lynn Baltz – JF Moran Co., Scott Lane – Beaver Street Fisheries, Robert Fox – The JZ Expedited Companies, Paige Savitz – Beaver Street Fisheries, Linda Carrion – North Florida Warehouse FTZ

(L to R) Anthony DeBari – Columbia Coastal Transport, Douglas Jackson – Atlantic Container Line, Joe Villa – Columbia Coastal Transport, Bruce Fenimore – Columbia Coastal Transport, Jason Kirin – Columbia Coastal Transport

(L to R) Torey Presti – National Shipping Agencies Inc., Arlene Heeneman – National Shipping Agencies Inc., David McDonald – McDonald, Miller & Coleman LLC

(L to R) Charlie Atkinson – Bahri Logistics, Paul Gigis – BP Express Inc., Rick Schiappacasse – JAXPORT, Tom Mutz – PENN Warehousing & Distribution

(L to R) Scott Fernandez – Aqua Gulf Transport, Tommy Webb – Averitt Express, Kent Williams – Averitt Express



(L to R) Justin Ryan – Florida Department of Transportation, Tom Knox – CDM Smith, Ken Page – JAXPORT, Rob Palmer – RS&H Consulting, Doug Menefee – JAXPORT

(L to R) Gary Morelli – SSA Cooper, John Walsh – SSA Cooper, Roy Schleicher – JAXPORT, Frank McBride – SSA Cooper

(L to R) Gary Salvador – AMPORTS, Samantha Cornelius – Canaveral Port Authority, Alberto Cabrera – Canaveral Port Authority, Ted Moore – BNSF Logistics LLC

(L to R) David Kaufman – JAXPORT, Bill Wade – Ceres Marine Terminals, Doug Hansen – Ceres Marine Terminals, Matty Appice – Port Manatee

(photo spread continued from previous page)

(L to R) John Wallace – Lewis Longman & Walker P.A., Lisa Wheldon – JAXPORT, Mitch Poole – Inland Logistics Solutions, Sherri Jackson – Interdom LLC

(L to R) Ken Kellaway – RoadOne IntermodaLogistics, Sarah Bond – RoadOne IntermodaLogistics, Jing Feng – GP Cellulose LLC, Kendall Kellaway III – RoadOne Intermodal Logistics

Trump administration must advance plan for infrastructure, JAXPORT conferees told

By Paul Scott Abbott, AJOT

Advancement of extensive U.S. transportation infrastructure projects is imperative, according to presenters in the opening panel discussion at the JAXPORT Logistics & Intermodal Conference.

The panelists called for the Trump administration to not only move transportation projects forward but also to maintain foreign trade, including via renegotiated agreements, as well as advance deregulation and tax reform.

Darrell Wilson, assistant vice president of government relations for Class I railroad firm Norfolk Southern Corp., said March 21 that the "big three" priorities he would like to see addressed in Washington are infrastructure investment, further deregulation of business and tax reform, including sustainable tax cuts.

Darrell Wilson, assistant vice president of government relations for Norfolk Southern Corp., left, listens to Tom Feeney, president and chief executive officer of Associated Industries of Florida, at the JAXPORT Logistics & Intermodal Conference. (Photo by Paul Scott Abbott, AJOT)

Kurt Nagle, president and chief executive officer of the American Association of Port Authorities, said he is optimistic that, when details emerge of President Trump's $1 trillion infrastructure pledge, a significant transportation component will be featured, including spending on waterside and landside connections for seaports, with ship channels maintained at authorized depths.

"If we want to be competitive, we need to catch up," Nagle said.

Another panelist, Tom Feeney, president and chief executive officer of Associated Industries of Florida, a Jacksonville-based lobbying group, said he has "some optimism" that considerable transportation projects will be moved forward, including via public-private partnerships.

Feeney, a former speaker of the Florida House of Representatives who served as a Republican U.S. congressman from 2003 to 2009, noted that $1 trillion of approved transportation already is in the pipeline.

Regarding Trump's seemingly protectionist stance toward foreign trade, Feeney commented, "No country ever protected itself into prosperity.

"Starting a trade war is a very bad idea," he continued, "and it will hurt American consumers far more than it will help American business."

Norfolk Southern's Wilson said a positive approach might be a requirement that 100 percent of steel used in infrastructure projects be made in the United States.

Wilson urged renegotiation of the quarter-century-old North American Free-Trade Agreement, a position supported by AAPA'a Nagle.

Nagle said his association has yet to take a formal stance on the proposed border adjustment tax, adding that export-dominant ports may benefit from such levies on imports while those with more imports are likely to be hurt.

The original version of the above first appeared March 21 as a blog at www.ajot.com.

*(**VIEWED** – continued from page 15)*

Craig Mygatt, chief executive officer of Maersk Group unit SeaLand, which does not yet call at Jacksonville, said he believes the most exciting country in the Caribbean region is Mexico, while Cuba also is generating great global attention, even though the United States is lagging behind other nations in serving it.

Referring to U.S. interests not stepping in to serve a potentially post-embargo Cuba, Mygatt commented, "We've either got to get our act together or it's going to get backfilled from the international community."

Crowley, whose U.S. company has been serving Cuba with non-embargoed "humanitarian" goods since 2001, well prior to U.S. sanction easing by the Obama administration, interjected, "Every other country is there in Cuba. I think we're missing an opportunity, and every day we wait, we're losing out."

In yet another discussion, executives of a pair of big U.S. retailers pointed out how technology is being deployed to enhance supply chain efficiencies.

Rick Schart, senior vice president for supply chain and e-commerce at Jacksonville-based discount department store operator Stein Mart Inc., said managing logistics costs is a key to better corporate margins, observing, "The retail supply chain needs to be a core competency of the business."

Schart said his company heavily relies upon data – not just from sales but also what people look at when browsing Stein Mart's website – in making decisions.

Taking advantage of technology is particularly important, he said, in an environment in which a product may be sold even before it comes into the company's possession.

Schart added that he sees "huge potential" in deployment of warehouse robotics.

Stein Mart Inc.'s senior VP for supply chain and e-commerce, Rick Schart, sees great potential for warehouse robotics. (Photo by Paul Scott Abbott, AJOT)

Wayne Varnadore, senior vice president and chief logistics officer of Bradenton, Florida-based retail chain Beall's Inc., said his company is increasingly counting on cloud-based solutions in a distribution model that has entailed removing half the inventory from its 525 stores.

"Visibility is a big deal for us," Varnadore said, "especially on the inbound side."

Beall's Inc.'s senior vice president and chief logistics officer, Wayne Varnadore, says supply chain visibility is vital. (Photo by Paul Scott Abbott, AJOT)