Truckers prepare for era of driverless trucks – coming sooner rather than later

By John D. Shultz, Logistics Management, 3/13/17

There is a lot of work being done behind the scenes involving some of the biggest names in and out of transportation, when it comes to driverless vehicles and trucks.

Forget what the experts and technogeeks are predicting for the era of driverless vehicles and trucks. What are the oddsmakers saying? Actually, Las Vegas is quite bullish on the prospect of driverless vehicles. In fact, Jim Murphy, an oddsmaking consultant for sports and non-sport novelty bets focused on the entertainment business, politics, technology and financial markets, is predicting that 21 million autonomous cars will be sold within the next 15 years.

“Autonomous cars–better known as ‘self-driving cars’–may seem the stuff of science fiction but they’re close to becoming reality,” says oddsmaker Murphy of sportsbettingexperts.com. His over/under on deaths this year involving autonomous vehicles? Two and a-half. If you bet the over, you can make $150 for a $100 bet. Under two and a-half deaths in autonomous vehicles will cost you $170 to earn $100. “Despite plenty of Luddite media scare stories autonomous cars are safer than traditional vehicles,” Murphy says.

But actually there is a lot of work being done behind the scenes involving some of the biggest names in and out of transportation. Mercedes has its “Future Truck 2025” already on the highways. Apple and Microsoft are involved. There is another combine, Waymo/Google/Alphabet, working out kinks in technology. And of course, Tesla and its innovative CEO Elon Musk, the peripatetic Canadian-American business magnate, investor, engineer and inventor is bullish.

So what’s happening in trucking? Last October, a unit of Uber called Otto successfully produced a self-driving truck that hauled a load of Budweiser beer without incident on a 120-mile trek through Colorado. Otto’s co-founder, Anthony Levandowski, a former self-driving car engineer for Google, has said he believes the most important thing computers will do over the next ten years is drive cars and trucks for people. That will have huge human resources ramifications for trucking, which currently has a shortage of 20,000 drivers that could grow to more than 100,000 within a decade because of demographics, increased drug and alcohol testing and tougher security screenings.Driverless trucks would change that dynamic in a hurry. “We are going to see a wave and an acceleration in automation, and it will affect job markets,” Jerry Kaplan, a Stanford lecturer and the author of “Humans Need Not Apply” and “Artificial Intelligence: What Everyone Needs to Know,” recently told the L.A. Times. “Long-haul truck driving is a great example, where there isn’t much judgment involved and it’s a fairly controlled environment.”

Preparing for such a day, the trucking industry is rapidly coming to grips with how driverless trucks may be regulated. The Trucking Alliance Board of Directors, which represents eight large trucking companies that operate 68,000 trucks, 175,000 semitrailers and containers, and employ more than 52,000 people, unanimously passed a resolution that “supports the development of advanced vehicle technologies that enable commercial drivers to utilize highly automated driving systems, enhancing their safety and security.”

Continued on page 2
The Trucking Alliance also supports the use of these technologies to achieve safety performance levels that rival commercial airlines and support other initiatives that focus on drivers and their safety, such as the following:

- Supports advanced driver assisted technologies in commercial vehicles, rather than commercial vehicles that rely solely on full automation;
- Believes that commercial drivers are an indispensable asset to the safe operation of commercial vehicles;
- Maintains the principle that commercial drivers are necessary to improve the safety and security of the general public; and
- Believes that commercial drivers are integral to supply chain accountability. This would include managing unforeseen weather events, emergencies, detours, vehicle conditions, computer software programs, cybersecurity disruptions, cargo security, and in providing efficient customer services.”

Meanwhile, an autonomous truck with a big “brain” has been launched by Embark, a San Mateo, Calif.-based company whose employees include alumni from SpaceX, Audi’s self-driving team and StanfordAI (artificial intelligence). Embark has built an autopilot system with a “central cortex” that uses a combination of sensors, radars and cameras that not only assess the environment to prevent crashes but can learn and adapt what it has learned to new situations. Embark’s truck uses a combination of radars, cameras and depth sensors known as LiDARs to perceive the world around it. These millions of data points from these sensors are processed using a form of Artificial Intelligence known as Deep Neural Nets or DNNs.

“Analyzing terabyte-upon-terabyte of real-world data, Embark’s DNNs have learned how to see through glare, fog and darkness on their own,” Alex Rodrigues, CEO and co-founder of Embark, said in a statement. “We’ve programed them with a set of rules to help safely navigate most situations, how to safely learn from the unexpected and how to apply that experience to new situations going forward,” he added.

For now, Embark doesn’t intend to deploy fully autonomous trucks onto the nation’s highways. Rather, it intends to test them on long stretches of highway where the trucks are less likely to run into traffic congestion. This is likely how driverless trucks will work at its infancy: At the city limit, Embark’s computerized truck hands off to a human driver who navigates the city streets to the destination. A human driver will still touch every load, according to an Embark news release, “but with Embark they’re able to move more loads per day, handing off hundreds of miles of freeway driving to their robot partners.” Rodrigues said the idea for Embark came after blowing a tire on the interstate and waiting four hours for the tow truck to arrive. “Every single 18-wheeler that drove past had a sign on the back ‘Drivers Wanted.’ It was so clear there was a shortage of drivers,” he said.

Transportation Secretary Elaine Chao said recently she is excited about the new automated technologies that have the potential to “dramatically change commercial transportation” and private travel, expanding access for millions. “The private sector is driving these innovations, working with cities and states like yours to demonstrate the safety and efficiency of automated cars and trucks,” Chao recently told a gathering of state highway officials at the annual meeting of the American State Highway and Transportation Officials (AASHTO).

“Automated technology, which includes autonomous or driverless vehicles, also has the potential to improve safety on our roads and highways, which is always a priority,” Chao said. She noted 35,092 people died in traffic crashes in 2015, a 7 percent increase over the previous year. In the first nine months of 2016, fatalities increased again by 8 percent over the previous year. Research shows that 94 percent of crashes are due to human error. “Automated technology has the potential to help eliminate human error and reduce crashes and fatalities,” Chao said. “So there’s a lot at stake in getting this technology right.”
TRIVIA QUESTIONS

1) Which state capital was the primary setting for the movie “Gone With The Wind”?

A. Montgomery AL  
B. Jackson MS  
C. Richmond VA  
D. Atlanta GA

2) Bouillabaisse is a French stew containing what main ingredient?

A. Beef  
B. Duck  
C. Fish  
D. Greens and broth

3) Which chocolate is considered healthiest?

A. Milk  
B. Dark  
C. White  
D. Bittersweet

4) A group of these animals is called a charm? Which one?

A. Baboons  
B. Teal  
C. Hummingbirds  
D. Ibex

5) How long were the first ocean containers?

A. 20 foot  
B. 35 foot  
C. 40 foot  
D. 48 foot

6) Malcolm McLean was the first to use ocean containers. Which industry did he leave to buy a steamship line allowing him to retrofit a vessel capable of stowing his containers?

A. Freight Forwarding  
B. Airline  
C. Bulk Ocean Shipping  
D. Trucking

Answers Later In The Newsletter

FUEL REPORT

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

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Change from week ago: -0.015  
Change from year ago: 0.465

Zim adds Wilmington, Charleston to Asia-US services

By Bruce Barnard, Special Correspondent, JOC  Mar 20, 2017

Zim Integrated Shipping Services announced Monday it is expanding its Asia-US East Coast services with the addition of calls at the ports of Wilmington and Charleston. Wilmington has been added to the Israeli carrier’s Z7S service between Asia and the US East Coast with the Zim Shanghai the first vessel scheduled to call at the North Carolina port on June 17. The new call offers a “market-exclusive” direct call from China, Southeast Asia, and the Indian Subcontinent Zim said. The rotation of the expanded service, starting May 14, is: Da Chan Bay, Yantian, Cai Mep, Port Klang, Colombo, New York, Wilmington, Savannah, Port Klang, Da Chan Bay.

The port of Charleston is being added to Zim’s upgraded all-water ZCP trans-Pacific service connecting China, South Korea, the US South Atlantic and Gulf, and the Caribbean. The new rotation of the service commencing on April 17 is: Qingdao, Ningbo, Shanghai, Busan, Kingston, Savannah, Charleston, Norfolk, New York, Halifax, Kingston, Qingdao.

“These improvements are part of our intensive efforts to offer extensive, effective, and efficient Asia-US services to our customers,” said Zim.
The Next Innovation in Shipping: Wind Power
By Costas Paris, WSJ, Updated March 15, 2017

More than a century after shifting away from wind power, the shipping industry is looking at ways to harness ocean breezes once again—this time to reduce reliance on fuel. The latest effort by Denmark’s Maersk Tankers uses rotating cylinders nearly 100 feet tall that can function as high-tech sails. The company, a unit of AP Moeller Maersk A/S, said Tuesday it will begin testing on one of its tankers and could add the technology to as many as four dozen ships.

Industry executives said previous efforts to harness the wind didn’t catch on with shipping operators as either the cost of such technologies was too high or tests didn’t yield the expected fuel savings. However, the lightweight and relatively cheap rotating sails show more promise, they said.

The cylinders are made with lightweight composite materials by Finland-based Norsepower Oy Ltd., and cost €1 million to €2 million ($1.1 million to $2.1 million) to fit to a ship, depending on its size. The design takes advantage of the so-called Magnus effect, in which a spinning object drags air faster around one side, creating a difference in pressure that moves it in the direction of the lower-pressure side. The sails are already in use on a ferry operated by Dutch shipping firm Bore Ltd. (see accompanying photo) and are expected to be installed on a Viking Line cruise ship. Maersk’s trial run of the technology is a joint venture with Norsepower, Royal Dutch Shell and the U.K.’s Energy Technologies Institute, an industry group focused on alternative-fuel use.

Bore Vice President Jorgen Mansnerus said the company installed the sails in one of its ships in 2014 and the results were better than expected. “If you have good wind, you save 6% on fuel,” Mr. Mansnerus said. “It’s an important cut in costs. The sails are durable. We plan to use them for a long time and are thinking of adding them to more ships.”

Maersk Tankers doesn’t yet have a cost estimate for the project, but believes the technology could cut its fuel consumption by as much as 10% and help it meet increasingly stringent emissions standards. Maersk Group, which also operates hundreds of container ships, currently spends $2.1 billion a year on fuel costs. Tommy Thomassen, Maersk Tankers’ chief technical officer, said the company is considering using them on its fleet of 45 long- and medium-range product tankers, though it won’t decide whether to roll them out until mid-2019.

Other shipping operators are also looking for ways to cut fuel costs. Food and commodities giant Cargill Inc. has equipped one chartered dry bulk carrier with a 320 square meter (3,444 square feet) kite made of artificial fibers by Germany’s SkySails, although shipping executives say such technology hasn’t been widely applied to oceangoing vessels. SkySails didn’t immediately respond to a request for comment. Maersk has said that the rotor sails it is testing are the most promising technology yet, but it has also been exploring other efficiency measures. It is testing drones to deliver ship supplies instead of traditional barges, as well as special paints on its hulls that would cut down on algae and other microorganisms that increase drag.

CMA CGM profits from higher rates on more volume By: Bruce Barnard, JOC, 3/10/17

CMA CGM believes the global container shipping market is recovering. CMA CGM plunged to a $325 million net loss in 2016 from a $567 million profit a year earlier, but the French ocean carrier bounced back into the black in the fourth quarter and said freight rates and container traffic were rising in the first months of 2017. CMA CGM is the latest container line to report higher rates and volumes in the fourth quarter that were unable to offset the losses accrued throughout the rest of 2016. The average freight rate per TEU at CMA CGM increased by 2.9 percent between the third and fourth quarters of 2016, but shrank 13.6 percent for the full year compared with 2015. Peak season demand, capacity discipline, and an early Chinese New Year accounted for carriers’ good quarter, however, with some saying too much capacity still remains on the water, a more clear picture of the state of the market should emerge in the earnings statements on the first quarter of 2017. (LINK: http://www.joc.com/maritime-news/container-lines/cma-cgm/cma-cgm-latest-profit-stronger-pricing-volume_20170310.html) for full article

APL expands Asia-North America service network with new Japan Express service by AJOT 3/15/17

APL today announced the launch of the Japan Express (JPX) service – a new weekly Trans-Pacific service which directly connects Japan with the United States West Coast. “We are excited to expand APL’s Japan-U.S. service network today with the new JPX service. With direct connectivity between Japan and the U.S., the JPX service will be synonymous with competitive transit time that is as fast as a 10-day transit from Sendai to Los Angeles. Together with APL’s comprehensive portfolio of Trans-Pacific services that is set to be enhanced under the OCEAN ALLIANCE this April, APL is delighted to offer our shippers with more compelling shipping options,” said Jesper Stenbak, APL Senior Vice President of Trans-Pacific Trade. The new JPX service will call the ports of Kobe, Nagoya, Tokyo, Sendai, Los Angeles and Oakland. The first sailing will commence from Kobe on 5 April 2017.
U.S. Consumer Prices Rose 0.1% in February

By Josh Mitchell and Jeffrey Sparshott  March 15, 2017
WASHINGTON—U.S. consumer prices rose further in February, the latest sign inflation is near the Federal Reserve’s target and likely clearing the path for higher interest rates. The consumer-price index, measuring what Americans pay for everything from cars to dental care, increased 0.1% in February from a month earlier, the Labor Department said Wednesday. Outside of energy and food costs, so-called core prices rose 0.2%. The figures matched economists’ expectations and bolster the Fed’s view of underlying strength in the economy. Consumer prices have risen 2.7% over the past year, the biggest annual gain since the 12 months through March 2012. Core prices have risen 2.2% from a year earlier.

The Fed monitors the index and other inflation measures as it aims for stable price growth, defined as 2% annually as measured by a separate index from the Commerce Department. All measures are generally pointing toward a modest but noticeable pickup in prices after years of stagnant growth. That development, coupled with steady job growth, is expected to lead the Fed to announce later Wednesday another rise in its benchmark interest rate. The Fed’s preferred measure—the Commerce Department’s price index for personal-consumption expenditures—showed earlier this month that prices climbed 1.9% in January from a year earlier. Wednesday’s report showed most major consumer expenses rising. Food costs climbed 0.2% from a month earlier. The cost of clothing and rent also increased. Energy costs fell 1% from January but were still 15% higher than a year ago. Prices of new used vehicles also fell from the prior month.

Republicans Pose Growing Challenge to Trump’s Trade Agenda

By William Mauldin and Jacob M. Schlesinger  WSJ  3/12/17
WASHINGTON—Republican lawmakers are showing increasing resistance to President Donald Trump’s trade agenda, worried that his plans could hurt exports from their states and undermine longstanding U.S. alliances. The concerns indicate that the biggest threat to Mr. Trump’s trade policy—which emphasizes new bilateral deals and a tougher stance against countries blamed for violating trade rules—is coming from his own party. The opposition from Republicans, who control both chambers of Congress, stands to complicate Mr. Trump’s efforts to overhaul the North American Free Trade Agreement, or Nafta, and tackle alleged trade violations in China. “We want to support him on all those things; we’re not there yet,” said Sen. Jim Inhofe (R., Okla.), whose state depends on aerospace and agricultural exports.

While many Democrats in Congress are interested in working with the Trump administration on trade, Republicans who have long backed free trade—many of them close to business groups—are warning that imposing tariffs could lead to retaliation against U.S. goods. Lawmakers from farm states are upset that Mr. Trump in January pulled out of the unratiﬁed Trans-Paciﬁc Partnership, or TPP, the 12-nation trade agreement that Barack Obama negotiated. “I’m more concerned about what they might do renegotiating existing agreements than what they do bilaterally with countries they don’t have agreements with,” said Sen. Chuck Grassley (R., Iowa), a member of the committee that oversees trade. “We know what we have, and I guess I don’t think it’s as bad as what the president thinks it is,” he said, citing Nafta, which opened markets for farm exports.

Answers to Trivia

Regional US LTL truckers outpace larger competitors

William B. Cassidy, Senior Editor, JOC,  Feb 28, 2017
When it came to revenue, mid-sized less-than-truckload carriers outpaced their larger competitors in 2016, expanding at a much faster pace, according to SJ Consulting Group data prepared for The Journal of Commerce’s annual ranking of the Top 25 US LTL carriers. In a historic break with past rankings, the smallest carrier on the list, $126 million mid-western regional carrier LME, was the fastest-growing LTL company in 2016. The Minnesota-based company increased revenue 14.1 percent year-over-year, SJ Consulting Group data show.

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Appearing in the American Trucking Association (ATA) website on their REPORTS, TRENDS AND STATISTICS page

“The trucking industry is the lifeblood of the U.S. economy. Over 70% of all the freight tonnage moved in the U.S. goes on trucks. Without the industry and our truck drivers, the economy would come to a standstill. To move 10.5 billion tons of freight annually requires over 3.4 million heavy-duty Class 8 trucks and over 3.5 million truck drivers. It also takes over 38 billion gallons of diesel fuel to move all of that freight. Simply – without trucks, America stops.”
Trump to Seek Spinoff of U.S. Air-Traffic Control From FAA  
By: AJOT Mar 16 2017

President Donald Trump is backing a controversial effort to place the U.S. air-traffic system under control of a nonprofit corporation as part of his budget plan. The president’s position gives new momentum to a proposal endorsed by most carriers to spin off the Federal Aviation Administration’s system that oversees the nation’s airways. The effort failed last year in Congress, but will be reintroduced again this year. A nonprofit corporation would be “more efficient and innovative while maintaining safety,” the administration said in a budget request to Congress being released Thursday. The document had few additional details about how the new organization should be set up and funded.

The lead proponent in Congress for removing air-traffic operations from the FAA praised Trump in a statement Thursday. Representative Bill Shuster, the Pennsylvania Republican who is chairman of the House Transportation and Infrastructure Committee, introduced a proposal to do that in 2015 and plans to attempt it again this year. “I commend President Trump for his leadership in calling for restructuring the role of the FAA,” Shuster said. “This budget takes the next step in what our committee produced last year.” Under Shuster’s plan, a board made up of airline and other aviation stakeholders would oversee a new air-traffic corporation. Instead of the current taxes on fuel and airline tickets, it would be funded by fees paid by aircraft operators. The FAA would continue to oversee safety and set aviation regulations. The lawmaker said passengers would “see a more efficient system, flight times decrease, on-time departures increase, emissions reduced, and 21st century technology deployed to guide our planes from gate to gate.”

Boeing unveils the 737 MAX 9  
By: AJOT Jan 27 2017

Following on from 737 MAX 8 rollout and flight test, Boeing is now rolling out the first new 737 MAX 9, right on schedule. 737 MAX 9 is the perfect answer to the need for growth while maintaining maximum airline profitability. As well as 16 more seats than the incredibly popular 737 MAX 8, it offers lower trips costs than the competition, the lowest trip costs, which minimizes the risk airlines take on as they grow. And yet provides more than enough additional seats to deliver consistently higher profits through all market conditions. What’s more, 737 MAX 9 enables airlines to reach farther than almost every single-aisle route they operate today. It has the longest range in its sector without the investment in any auxiliary fuel tanks, and with one auxiliary tank, matches the versatility of the 737 MAX 8 with a range of 3,515 nautical miles.

Air cargo transformation is taking off due to e-commerce  
By Patrick Burnson  
February 28, 2017

Dr. Michael Hanke, founder and managing director of SkaiBlu, an e-commerce consultancy assisting clients in the aviation industry, tells Logistics Management that ecommerce has transformed the air cargo business from being supply chain focused to be much more “customer centric.” He says that from a customer’s perspective, with e-commerce, “convenience”, “control”, and “cost” (the so-called three “Cs”) assume a crucial role: Today, customers determine the hours of operation (they log on whenever they want, thus a company always has to be “on”), customers increasingly want to serve themselves (think of a retailer checking the status of their shipments via e-tracking or reserving shipping space through an air cargo business website), and companies’ e-commerce services need to be delivered at the customer’s location (be it an office desktop, a mobile device, or wearable computing).

Hanke, author of “Airline E-commerce: Log on, Take off.” notes that at the same time, e-commerce has made market places more transparent (and thus more competitive). “Customers have never had access to more information today and with the next best website only one mouse click away, suppliers in the air cargo value chain need to be more than ever mindful of their price levels and quality of service,” he adds. Hanke says another impact of e-commerce is improved efficiency of business processes (“think of the e-airway bill or the application of e-commerce software to help track/analyze the levels of inventory at suppliers and manufacturers in real-time for more effective JIT”).

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Optimizing Pallet Flow Performance

By: AJOT | Mar 08 2017 at 08:53 AM | Transport Intermediaries

Following a few pointers can help to maximize productivity, extend equipment longevity, and improve safety.

While the advantages are numerous, due in part to its design and moving parts, there are additional considerations for those operations looking to improve production with a flow storage system. These tips can help prolong the life of the equipment, cut maintenance costs, and enhance safety with the proper design, selection, and operation of the system.

Understanding Flow Storage
Consider flow storage when efficient storage is critical and space limited. Flow storage is useful in many applications including ambient, cooler, and freezer environments, raw materials receiving and storage, work-in-process, buffer storage, finished goods and cross docking. It is also often successfully used in pick module and automatic storage and retrieval systems (AS/RS). Understand how flow storage works. Unlike traditional selective rack, a pallet flow storage system has two parts: a static rack structure and dynamic flow rails. The flow rails are set at an incline in the rack structure, which allows loads placed on one end of the rack to move by gravity down to the unloading end. Rollers let the loads move smoothly while self-energized speed controllers act as gentle brakes. As a load is removed, the loads behind it move forward automatically. However, due to pallet flow system design as well as moving parts, there are additional things to consider.

Pallet Flow Design Considerations
Choose a design that can adapt to both current and future needs. Because budget and inventory requirements change at both the facility and corporate level, it is wise to select a flow system with a design that can grow as your business needs grow. “With flow systems, bays can be added to groups and the bay widths and depths can be easily be expanded to hold additional inventory, which allows you to buy for your current needs and expand later,” says Ryan Wachsmuth, Dynamic Storage Sales Manager at Steel King Industries (steelking.com), a major designer and manufacturer of warehouse material handling, storage and safety products. Ensure that the flow storage system has enough rack strength. To be even more accommodating of future needs, such as higher or heavier pallets, Wachsmuth also advises selecting a flow system that provides vertically adjustable beams and ample strength. “You can always re-profile your flow rack to handle higher, heavier pallets if you design for it,” says Wachsmuth. “Let’s say you use a 48” high pallet today, but decide later that a 60” high pallet is more efficient because you want to add two more levels of ice cream to each pallet. A system with vertically adjustable beams would allow you to do it, provided you have the rack strength.”

Ensure that capacity matches capabilities. When you design your flow storage system, you have to know your warehouse’s capabilities and limitations. For instance, know how low girders, trusses, warehouse lighting, HVAC ductwork, and sprinklers and fire suppression lines hang, and determine how much clearance is required. In addition, before you begin loading the system it is critical to consult with the local fire marshal and get their approval on the design and layout to ensure it meets fire code regulations.

Safety and Productivity
Plan for expected flow system use. If your warehouse facility is heavily used, forklift drivers are more prone to impact racking. Because a flow system’s entry uprights tend to receive the most damage from forklift impact, Wachsmuth advises working with a vendor that offers a range of reinforced upright options. Guardrail, rack and column protectors, as well as weld bumpers (angles welded to the aisle side beams), can also help to protect the pallet flow rack system from forklift impact. If impact occurs, these safety items can be quickly replaced without having to close off lanes or bays. Facilities should also consider holding extra rack inventory, such as uprights and beams, so any rack damage can be repaired immediately. This keeps production going without waiting for a supplier to ship replacement parts.
Consider facility requirements and standards. For industries whose products require a high hygienic standard, such as for food, dairy, beverage or pharmaceutical products, it is important to avoid any racking with holes, open spaces, or flat spots where food or liquid can accumulate, potentially leading to rot, mold, or contamination issues. In these cases, to better meet FDA or USDA regulation, Wachsmuth recommends that flow systems use a sanitary structural channel rack design. As an example, Steel King offers the SK3000, which is modified with angled tubular cross bracing. The angled surfaces and closed tubular construction leads food or liquid that falls on the rack to flow off, thus preventing potential hygienic or contamination issues.

Completing the System Seek single source accountability. Designing and installing a pallet flow system could involve a separate pallet flow manufacturer, a rack manufacturer, as well as a dealer and installer. However, this type of setup is not recommended by experts due to the significant coordination required from each of these independent parties to resolve any issues. “To make certain that everything works together properly, it is a good idea to work with a single source manufacturer of both racks and flow components,” says Wachsmuth, who notes the company also has a national dealer network. “This provides one point of contact for planning and coordination, answering questions, troubleshooting, and resolving any issues.” Finally, ask for a full pallet test before signing off on the system.

Successful flow systems are the result of proper design and thorough testing of all the related components. The vendor should perform a ‘full test’ of the system, including rail type, rail pitch, brake spacing, as well as a full pallet test to ensure it fits your pallet, product, and workflow. “There are many variables to a flow system, and even hundreds of pallet variations, such as wood, plastic, metal, and bottom boards running parallel or perpendicular, all of which can affect flow,” says Wachsmuth. “So it is vital to confirm that the pallets and entire flow system will work as expected.” When done correctly, a pallet flow system can double high-density storage and improve time-sensitive inventory, while enhancing the efficiency, productivity and profitability of the operation.

### De-Consolidation for imports

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**Spring forecast to bring double-digit US import gains**

by Bill Mongelluzzo, Senior Editor, JOC, 3/9/17

US ports this spring will handle double-digit increases in containerized imports thanks to strong consumer demand and an economy that shows no signs of slowing down in the near future, according to Global Port Tracker. Imports in January increased 12.5% compared with January 2016 as factories in Asia moved up production before closing for the annual Chinese New Year celebration, according to the monthly report published by the National Retail Federation (NRF) and Hackett Associates. February numbers are not complete, but the publication projects only a 4.2% year-over-year increase in imports owing to the two-week lull in production. March and April should be quite strong, though, with imports in March projected to increase 10.6% and April imports projected to increase 10.1% year-over-year. Imports should then return to more average levels, increasing 2.9% in May, 5.5 percent in June, and 5.2% in July compared with the same months last year, according to Global Port Tracker.

Imports in the first half of 2017 are projected to increase 7.4% from the same period last year, although they could grow more slowly in the second half of the year. That aligns with the 2017 forecast by IHS Markit chief economist Mario Moreno who projects 6% growth in containerized imports for the year. “Consumers are spending more freely and retailers are stocking up for the spring and summer seasons,” said Jonathan Gold, vice president for supply chain and customs policy at the NRF. Job and income growth, coupled with low debt, will drive 2017 retail sales up 3.7 to 4.2 percent, the NRF stated.

The outlook for the second half of 2017 is still cloudy owing to uncertainties surrounding a proposed “border adjustment” tax, the new administration’s decision to pull the United States out of the Trans-Pacific Partnership, and the future of the North American Free Trade Agreement. These uncertainties could eventually discourage trade, but in the meantime the opposite is happening. “Trade is continuing to grow despite these developments in Washington,” said Ben Hackett, founder of Hackett Associates.