2015 ANNUAL REVIEW & OUTLOOK

MARITIME EXECUTIVE COMMENTARY

discharging at those sites now is running into problems. On the West Coast, Seattle-Tacoma and the Los Angeles-Long Beach areas are able to accommodate vessels requiring 50-foot depths, but landside facilities are limited. Ships in Southern California already are waiting in line for turns to dock.

It not only is the channel depth, but it also is the very critical lack shoreside of being able to keep the containers moving efficiently.

Lacking are truck drivers throughout the nation. A driver shortage of 100,000 by the year 2018 is predicted. Who is going to drive those containers to their destinations — be it local or 1,500 miles away? The railroads already are throwing up their switches with the hue and cry, "We are overloaded."

Even before the containers reach the point of the rail flatcar or the truck hauler, there is a critical lack of chassis, so how is the container going to be moved?

In the above instances, the channel depth is not the problem, but the growing headaches are the congestion on landside as well as the availability of operational chassis. Otherwise, the global containers will be delayed aboard the mega-bottoms.



INSTITUTE OF INTERNATIONAL CONTAINER LESSORS STEVEN R. BLUST

PRESIDENT www.iicl.org

AS WE ENTER 2015, the world economy is likely to continue its modest trade growth pattern experienced during the past few years, and the global container supply is expected to continue its growth to meet the demand. Global container manufacturing is projected to approach 3.2 million 20-foot equivalent units, according to Drewry, with the world container fleet reaching a new high approaching 38 million TEUs in 2015.

The sea change convergence of record-breaking container volumes, ever-increasing-sized ships and evolving business models has resulted in the recent port congestion and supply chain stress in several major U.S. container ports and trade corridors.

The complexity and inter-related

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impact of these changes will require collaborative and cooperative efforts among the many parties involved to identify and implement solutions to address the challenges. By working together, industry partners have the best opportunity to meet the business requirements of growing commerce while controlling costs, maintaining safe operating conditions and expeditiously addressing new challenges as they develop.



INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS SUSUMU NARUSE

SECRETARY GENERAL www.iaphworldports.org THERE IS NO doubt that ports around the world are facing challenges accommodating megacontainer ships that are becoming bigger in size. It is also the case with major cruise ports in the world that are adjusting to accommodate mega-cruise ships whose sizes are also increasing because of a booming international cruise business.

The following is an excerpt of my presentation at the Minister's Roundtable meeting on "Mega-ships and Their Impact on Port Development and Safety," OECD's International Transport Forum, which was held in Leipzig, Germany, last May. The meeting was attended by the ministers of transport from France, Norway and Malta, vice ministers from other countries and industry representatives, including the European Shippers' Council and the International Chamber of Shipping. From my standpoint, it was quite significant that the OECD convened a meeting focused on port issues for the first time in its history.

In my presentation, I pointed out some challenges ports face to accommodate mega-ships. Ports need to develop deep and large container terminals with sufficient infrastructure such as deep approach channels, which require a lot of resources and sometimes financial support from

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the public sector.

Port operational efficiency needs to improve because megaships call at specific ports less frequently, but with a larger amount of containers loaded/unloaded for a call. A Port Community System is necessary to smoothly transact port and import-export procedures. And ports need to develop efficient hinterland connections in collaboration with other landside authorities.

Finally, ports also may need to develop a contingency plan for possible accidents of mega-ships because the intensity of accidents would be much larger and the recovery efforts would require much more time and resources.

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JAXPORT BRIAN W. TAYLOR CEO

www.jaxport.com

OUR INDUSTRY IS set for change and opportunity on several fronts in 2015:

• Emphasis on exports: Since the end of the Great Recession, exports have accounted for more than half of the economic growth in the U.S. and during the last two years have produced annual compound growth of more than 12 percent. Seventy percent of the world's purchasing power resides outside the U.S., and during the next five years, 85 percent of global economic growth will occur outside of our borders.

• Focus on distribution centers: Communities are awakening to the importance of the logistics industry to creating a vibrant economy. Research proves the distribution industry offers a range of wages with even the lowestsalary warehouse jobs often paying more than most service positions, with many employers offering benefits such as health insurance and training.

• LNG as both fuel and commodity: With a 100-year supply of an energy source that is cost effective,



as well as environmentally friendly, the national dialogue around natural gas, liquefied and compressed, will continue to accelerate in the new year. Maritime companies, facing increasing costs and striving to be good stewards of the environment, have quickly begun tapping this cleaner energy. Two Jaxport partners will take delivery of the world's first LNG-powered container ships soon, making Jacksonville the epicenter of this pioneering effort. The next step is the expanded use of LNG outside of the U.S.

• The Asia-Pacific trade: By 2020, the annual value of goods exported to key Asia-Pacific markets will approach \$10 trillion, equivalent to nearly two-thirds of the entire U.S. economy. Asian nations will soon account for six of the 10 fastest-growing major economies in the world, and nearly all of them will be growing faster than the United States. This burgeoning market creates significant opportunities for exporters, distribution centers and the base of workers required to produce and transport products. We must continue to evolve our terminal assets and infrastructure to facilitate the efficient movement of large cargo volumes.





MAERSK LINE NORTH AMERICA MICHAEL J. WHITE

PRESIDENT AND CEO www.maerskline.com 2014 WAS A remarkable year for many reasons, not the least of which was a return of debilitating congestion at ports and key inland hubs, resulting from weather and labor issues exacerbating what has clearly once again become a capacity issue borne from years of underinvestment in infrastructure and an unwillingness from an industry to change to meet the challenges of a new reality. Whether it is human nature or blind competitiveness that compels

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companies to continue pushing outdated solutions and steadfastly avoid changing an approach that has driven mediocrity and inconsistency at best, is perhaps unanswerable. What is undeniable, however, is that change is needed — and change is coming to our industry — whether or not we embrace it.

To quote Albert Einstein: "We cannot solve our problems with the same thinking we used when we created them." As an industry. we cannot continue to accept that terminal and port productivity trails other geographies; we cannot continue to lean on antiquated chassis models that only ensure massive inefficiency of critical assets while tying up precious terminals and adjacent container yards; we cannot continue to offer excessive "free time," thinking that the equipment or land it occupies is ever really "free"; we cannot continue to ignore the availability and benefits of new technology that will streamline booking, documentation and operational activities, increasing time for more productive, revenue generating activities; and, speaking as a carrier, we cannot continue to deploy capacity that far outstrips expected demand throughout the year and expect to achieve acceptable results that enable continued investment.

For too long, we have accepted a penchant for making a complex business complicated. There are a myriad of ways we can simplify our business and daily interactions, reduce our mutual costs and enable a future of more sustainable growth and profitability for all who contribute, but we have to change our approach. The future is coming whether we're ready for it or not, and if 2014 provides any evidence, more of the same is definitely NOT an answer.



MARITIME ASSOCIATION OF THE PORT OF NEW YORK AND NEW JERSEY EDWARD J. KELLY

EXECUTIVE DIRECTOR www.nymaritime.org

I SEE NO startling developments this year, but rather a continuing evolution of three themes increasingly impacting transportation networks: consolidation of capacity, environmental considerations, and technology.

The need for cost control through economies of scale continues to push carriers into choosing whether to invest huge amounts of capital, merge with other operators, or enter into some variation of joint service agreement. While actual mergers continue on a somewhat slow pace, joint service options have increased dramatically, and now include not just ships, but also terminal networks and even chassis assets. I recall a time not that long ago when The Journal of Commerce published the Top 100 Container Lines in U.S. Trade, a list that now is limited to only 40 such carriers, and most of those are committed to jointservice arrangements.

The external push to adopt increasingly stringent environmental controls regarding vessel airborne emissions, waterborne discharges and marine life activity zones continues to force operators to search for new solutions for compliance with these regulations, and will almost certainly result in the widespread electrification of land-based operations and the usage of LNG to power vessels in the near future. The almost exponential increase in technological capacity has, and will continue to have, a dramatic impact on the industry.

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Such developments as high-output LNG engines, ballast water treatment systems, "virtual" aids to navigation, online booking systems, enhanced mobile communication capability and asset-sharing software will all combine to help propel our traditional industry into a future of maximized asset performance.

The art of calculus measures the rate at which change occurs. That rate is becoming increasingly fast. For thousands of years, shipping remained virtually unchanged. Malcom McLean, who gave us the box that changed the world less than 60 years ago, would hardly recognize today's industry.



MARYLAND PORT ADMINISTRATION JAMES J. WHITE

EXECUTIVE DIRECTOR www.marylandports.com THERE CONTINUES TO be strong uncertainty in the global market. While the U.S. economy continues to slowly rebound, most of the rest of the world's fiscal struggles persist. When container rates deteriorate, it places a much larger burden on