



www.caribbean-maritime.com

# Caribbean MARITIME

ISSUE No 27  
JANUARY - APRIL 2016

## Special Feature PORT SECURITY

**COMPLACENCY**

THE GREATEST TERRORIST THREAT OF ALL

**RADIOACTIVE SCREENING**

COOL HANDLING OF 'HOT' GOODS







**JOIN US AT THE FIRST CARIBBEAN  
TRANSPORT AND LOGISTICS TRADE FAIR**  
11, 12 AND 13 MAY 2016  
MADIANA CONGRESS CENTER, MARTINIQUE

Exciting new opportunities lie ahead for the Greater Caribbean region and its transport and logistics sector – not least because of the expanded Panama Canal.

Our businesses are rising to the challenge by organizing themselves in networks with a view to perfectly controlling their logistics processes and competing on level terms with the multinationals.

The time has come for innovation and boldness. By offering made-to-measure logistics solutions, we can challenge the niche markets and develop customer loyalty.

Mastering the whole logistics chain is a major challenge for island states across the Greater Caribbean – but it is also a real opportunity to gain a long-lasting competitive advantage.



**Let's move the Caribbean!**

Boite Postale 7105, 97276 SCHOELCHER CEDEX  
Mobile: +596 696 29 22 98  
Fax: +596 596 61 18 99  
Email: [contact@sctl-event.com](mailto:contact@sctl-event.com)  
 @ClusterGAT CARAI  
[www.clustergatcaraibes.com](http://www.clustergatcaraibes.com)

# Caribbean MARITIME

www.caribbean-maritime.com



Issue No 27  
JAN - MAY 2016



The official journal of the:



caribbean shipping association

## MISSION STATEMENT

To promote and foster the highest quality service to the maritime industry through training development; working with all agencies, groups and other associations for the benefit and development of its members and the peoples of the Caribbean region.

## GENERAL COUNCIL 2015-2016

President: David Jean-Marie  
Vice President: Juan Carlos Croston  
Immediate Past President: Grantley Stephenson  
General Manager: Fernando Rivera  
Group A Chairman: Roger Hinds  
Group A Representative: Nathan Dundas  
Group A Representative: L. Marc Sampson  
Group A Representative: Hernán Ayala  
Group B Chairman: Ernest "Ashley" Taylor  
Group B Representative: Anibal Ochoa  
Group C Chairman: Stephen Bell  
Group C Representative: Cyril Seyjagat  
Group D Chairman: Jeanine Liong-A-San

CSA Secretary: Dionne Mason-Gordon

## Caribbean Shipping Association

4 Fourth Avenue, Newport West,  
PO Box 1050, Kingston C.S.O, Jamaica  
Tel: +876 923-3491  
Fax: +876 757-1592  
Email: csa@cwjamaica.com  
www.caribeanshipping.org



12



18



21

PUBLISHER:

land&MARINE

Land & Marine Publications Ltd  
1 Kings Court, Newcomen Way  
Severalls Business Park, Colchester  
Essex, CO4 9RA, United Kingdom  
Tel: +44 (0)1206 752902  
Fax: +44 (0)1206 842958  
Email: publishing@landmarine.com  
www.landmarine.com

Views and opinions expressed by writers in this publication are their own and published purely for information and discussion and in the context of freedom of speech. They do not necessarily represent the views and opinions of the Caribbean Shipping Association. - The Publisher.

## CONTENTS

### 2 FROM THE CSA PRESIDENT

An exciting but challenging year lies ahead

### 4 HARBOR VIEW

Panama Canal

### 6 CUBA FERRIES

Ferry close – but no cigar yet

### 10 SOLAS

New rules to tackle 'misdeclared' cargo

### 12 OIL SPILLAGE

Better safe than sorry...

### 14 MASTER LIMITED PARTNERSHIPS

Down but not defeated...

### 18 LNG BUNKERING

If you build it, they will come...

### 21 SPECIAL FEATURE - PORT SECURITY

21 Internal Security

23 Complacency

25 Narcotics

26 Scanners

28 CCTV

### 29 LOGISTICS FAIR

Martinique to host key logistics trade fair

### 30 DAVID JEAN-MARIE

Opportunity knocks for our modernized port system

### 34 PORT BRIEFING

### 36 STARBOARD BRIEFING

### 38 CSA DIARY

45th Caribbean Shipping Association  
Annual General Meeting, Conference and  
Exhibition

### 42 RUSSBROKER CARIBBEAN MARKET REVIEW

Markets head for slowdown as global  
economy weakens

### 46 BIG DATA

The importance of big data







# An exciting but challenging year lies ahead

**I**t is my pleasure to address you at the start of what will be an exciting, pivotal year for all involved in commercial maritime activities in the Caribbean. Allow me to reiterate my thanks at being entrusted with the role of custodian of the association for the next year as its new President. I again assure you of my commitment to building the CSA to be a stronger, more vibrant industry leader for shipping in this hemisphere.

That said, we all recognize that it will not be business as usual in 2016 given the opening of the third lane of the Panama Canal and the resultant changes in global

transportation corridors. We are also called to reckon with the emergence of Cuba as a dynamic player in the region's shipping industry, as well as the potential impact of the Nicaraguan inter-oceanic canal (though now apparently on hold), the advent of the large vessel conglomerates, the new global emissions and container weight regulations, among other factors.

## THINK TANK

All represent paradigm shifts that the CSA will have to interpret and respond to. All require us to strengthen our role as a regional 'think tank' and speak out on emergent issues. As industry leaders, we have to chart a course for the rest of the

---

Allow me to reiterate my thanks at being entrusted with the role of custodian of the association for the next year as its new President

---







industry to follow. We must redouble our efforts as advocates for territorial legislative and trade policy changes to facilitate growth. We must bolster these efforts by evolving our local operations and service provision to meet new global standards.

The fundamental changes our industry is undergoing also emphasize the importance of scale and the wisdom of collaboration, coordination and consolidation. It highlights the need for more dialogue between ports and terminals to ensure that we can capitalize on the opportunities arising from the shifting operating dynamics within the Caribbean region. I urge us to consider how we can all leverage our collective operational knowledge and best practices from one port to another to our mutual advantage.

As the Caribbean focuses on our infrastructure and capacity strengthening, it is critical that we remain primed to respond to the opportunities arising in our market, especially where our competitors' limitations are among our strongest value propositions. With an expanded Panama Canal as the centerpiece of our strategy and the widening gaps in the US East-

West Coast trade, ports in the Caribbean should become increasingly attractive to both industry regulators and terminal operators. We have the collective capacity to handle current and expected volumes efficiently; and we have a long history of stable industrial relations with employers and unions. We must increase our own efficiencies and therefore keep the cost of doing business with us at attractive levels.

### **INTEGRATE**

As populations continue to climb and as world markets further integrate, the global flow of goods will have to keep pace. The world will require more from its logistics and supply chains, with much of that demand falling on global maritime logistics. We must continue to work as an association to ensure that our collective mission to become regional facilitators of global trade is realized. This must occur in a manner that helps to create an atmosphere where all of our economies can reach their full potential.

This year will not be without continued challenges to the region's shipping interests. However, I am confident that we

are equipped with the requisite levels of astuteness and agility needed to weather the storm and to capitalize on the myriad opportunities that will present themselves.

I wish you all a successful year and I look forward to seeing you at our 15th CSEC Conference in Cocoa Beach, Florida, in May.



**David Jean-Marie**  
*President*  
*Caribbean Shipping Association*



**HARBOR VIEW**







## PANAMA CANAL

The opening of the newly enlarged Panama Canal inches ever closer. As can be seen from the photograph, work is nearing completion, with the lock gates installed and tested. According to the latest update from the Panama Canal Commission, the official opening date is set for some time in 2016.





# FERRY CLOSE

## - BUT NO CIGAR YET

One of the obvious spin-offs from the thawing of relations between the United States and Cuba is the prospect of re-establishing regular ferry links to the island from Florida. But with the Cuban government continuing to withhold its permission, it remains a tantalizing objective. Robert Deaves reports.

**C**uba is just 80 nautical miles off the southern tip of Florida; yet for the growing number of passenger ferry companies that have been set up in recent years to bridge the gap, it might as well be a thousand miles.

In May 2015 the US Treasury Department started granting licenses to ferry services from US ports for the first time in 50 years. News is scant, but initially the long-awaited services were expected to commence in the fall of 2015. When this didn't materialize, a possible commencement in late 2016 has been forecast, but ultimately everyone is waiting for the Cuban authorities to reciprocate the initiative.

The thawing of relations between the USA and Cuba after half a century of US-imposed trade embargo is opening up many new possibilities for trade and tourism for both countries. A number of new ferry services have been announced over the past six months, but so far not one company has been granted permission from the Cuban side of the Florida Strait.

One of the first companies to jump into the fray was CubaKat. Established in 2011, before the ease in US-Cuban relations, the company intends to run a four-hour round trip catamaran passenger service between several Florida ports and Cuba.







Brian Hall, chief executive of CubaKat, said: "We have not finalized details on vessels, locations and route yet, but Marathon and Key West still represent the best US departure points, with Havana being the prime target for arrivals."

## DEMAND

He says the demand for their services is huge, both from people who still have family on the island as well as from numerous groups such as schools, colleges and churches. "We've been amazed at the demand," said Hall. "We're also continually getting requests from non-US citizens who, while visiting the US, want to extend their vacation with a visit to Cuba. Each week, for nearly the past year, we have received dozens of inquiries. We think the demand will allow for multiple ferry and cruise operators to be successful."

The company is all ready to begin services, but is waiting patiently for its Cuban license.

"While we were hopeful for a 2015 launch date, we're now focused on the spring of 2016," said Hall. "The Cuban government, at this stage, has not granted licensing or indicated approval of services, available

ports, visa requirements and fees. We are, however, exploring other options and strategic partnerships that would allow our ferries to operate between Florida and Cuba. In fact, we feel as though we're very close to finalizing an agreement with a third party that would allow us to begin operations.

"We have vessels that are essentially ready for operation. There are still issues

to be considered and finalized, including US Customs requirements, parking arrangements at US ports, ticketing software, a more robust website, a restructured marketing campaign, employee development, and fees and taxes for various entities."

For the time being, most operators are resigned to waiting. Hall concluded: "While ferry operations are a key focus for our



'We're hopeful of a spring 2016 launch but the Cuban government has not granted licensing or indicated approval of services at this stage'





**Jan De Nul**  
GROUP



# PEOPLE AND GLOBAL EXPERTISE



These are the corner stones of Jan De Nul Group's success. Thanks to its skilled employees and the world's most modern fleet, Jan De Nul Group is a leading expert in dredging and marine construction activities, as well as in specialized services for the offshore industry of oil, gas and renewable energy. These core marine activities are further enhanced by Jan De Nul Group's in-house civil and environmental capabilities offering clients a complete package solution.

Our professional and innovative solutions are trusted across the industry. Whether it concerns the construction of the new locks in the Panama Canal or a new port complex in Western Australia, together with our customers, we build for further economic development.

[www.jandenu.com](http://www.jandenu.com)

follow us on





group, the Cuban authorities certainly have a number of other issues they are sorting through in regards to opportunities for expanding relationships with American enterprises. There are a fair number of details to work through. We also understand officials in Cuba are trying to make the best decisions for their port cities and the

carry 570 cars.

United Caribbean Lines (UCL) expects to offer services from the Port of Miami and Tampa Bay. Its proposed schedule will have ships departing Florida in late afternoon, arriving in Havana the following morning. Ferries will depart Havana late afternoon and arrive in the US the following morning.

and cargo traffic. A completely open border with no US restriction would probably have resulted in a ferry service already starting. That's not the case, so the pressure to start is simply not there at the moment with the US continued embargo."

Speaking about UCL's proposed services, he said: "We intend to operate from both Miami and Tampa on a daily service. It will be overnight, departing Florida in the evening and arriving in Havana the following morning. Same for the return trips. Vessels will be chosen based on the final permits and contract terms of the Cuban government and the amount of competitive capacity that will be in play. The remainder of embargo restrictions will also be a mitigating factor."

## RESTRICTIONS

However, he is more pragmatic about the potential growth in ferry services between Florida and Cuba. "It depends on whether there are restrictions on American travelers still in effect. With the current restrictions there is traffic enough for one, maybe two, ferry services. With open borders and no restrictions there will be traffic in cargo and passengers to make double that viable."

At present, however, travel to Cuba remains prohibited for US citizens except for 12 approved categories, such as people-to-people trips and humanitarian work. And until the Cuban authorities start to issue the necessary licenses, and turn the clock back 50 years to the pre-embargo days of Florida to Havana travel, that is how it remains.

## 'The Cuban government is in the review process for the proposed ferry service in general. There is no specific date established for when they will take additional action'

citizens living there who may be affected by the influx of ferry travelers."

As well as CubaKat, many other companies have applied for a license from the US Treasury Department and are ready to begin ferry services. Not all of them operate from Florida.

New York-based Paradise Express Ferry LLC is hoping to add Cuba to its range of services after winning the bid to develop a ferry terminal in Jamaica to introduce some Jamaican services from Montego Bay. It plans to use 40 meter aluminum catamarans with a capacity of 250 people. While several companies have applied for Florida to Cuba services, Paradise Express is the only one to announce the possibility of services from Jamaica to Cuba. The scheduled services will run several times a day. Florida-based Baja Ferries, which also operates routes to Mexico, plans to run a passenger and cargo service to Cuba from Miami. It is investing US\$ 100 million in the service, with modern 1,000 passenger capacity ferries with 500 cabins.

## WAVE PIERCING

Cuba Ferry International is operated by Havana Ferry Partners and was formed in 2009 to establish passenger and cargo services between the Florida Keys and Havana using 300 passenger capacity wave-piercing vessels.

Attica Holdings, through its wholly owned subsidiary Superfast Ferries, plans to offer a daily service between Miami and Havana using two of its modern 1,700 passenger capacity ferries, which can also

Bruce Nierenberg, chief executive of UCL, expects the services to be operational during 2016. "The Cuban government is in the review process for the proposed ferry service in general," he said. "There is no specific date established for when they will take additional action. It's only my opinion, but I would expect that, given the circumstances and amount of new opportunities on the plate of Cuban tourism, they will make decisions on the ferry service in early 2016 for implementation before the end of 2016." He explained why he thought the process was taking longer than expected: "Many issues go into this situation. Cuba has many things to consider. There are terminal needs, security issues, traffic definition and expectations, and the impact of the ever-changing US embargo on both passenger





# NEW RULES TO TACKLE 'MISDECLARED' CARGO

## Spate of incidents leads IMO to impose mandatory verification of mass of packed containers

An important new regulation for all parties involved in international container shipping will come into force on 1 July 2016 with the implementation of amendments to SOLAS Regulation V1/2. This will make it mandatory for the gross weight of a packed container to be verified before it can be loaded onto a ship.

**F**or some years there has been a lot of debate on how best to tackle the issue of container collapses and losses due to overweight containers. The widespread practice of overloading containers has led to a spate of incidents around the world – everything from broken cranes and fork-lift trucks to damaged vessels and even ship casualties, not to mention the risk of personal injury to seafarers and others.

The resultant loss in terms of delays, costs and interrupted services can hardly be overstated. It was for this reason that the International Maritime Organization in 2011 began to develop measures to prevent loss of containers in response to a proposal

by Australia, Denmark and the Netherlands and comments by the World Shipping Council and the International Chamber of Shipping.

A key element of this work was the verification of container mass. It was agreed that the gross mass of a container should be verified either by weighing the packed container using calibrated and certified equipment; or by weighing all packages and cargo items and adding the tare mass (the weight of the empty container) to the sum of the single masses.

### AMENDMENTS

According to the new amendments to Regulation V1/2 of the Safety Of Life At Sea (SOLAS) Convention, the shipper must ensure that the verified gross mass of each packed container is stated in the shipping document. This document, signed by the shipper or his representative, must be submitted to the master or his representative, and to the terminal representative, in good time for the ship stowage plan to be drawn up. If not, the container shall not be loaded onto the ship.

There is an exemption for containers carried on a chassis or trailer that are driven onto or off a ro-ro ship engaged in short international voyages.

### AT A GLANCE...

The SOLAS amendments will take effect on 1 July 2016 and the new requirements can best be summed up in two main bullet points:

- Verified weight is a condition for loading a packed container onto a ship.
- Shipper is responsible for providing the verified weight.





## PROBLEMS WITH WEIGHT

The extent of current problems relating to 'misdeclared container mass' was made clear by Colin P. Young, the Caribbean's regional maritime adviser to the IMO, when he addressed delegates at the Caribbean Shipping Association AGM in Cartagena, Colombia, in October.

Mr Young presented a list of typical problems arising from overweight containers:

- Incorrect vessel stowage decisions
- Restowage of containers (involving delays and costs) if overweight condition is ascertained
- Collapsed container stacks
- Containers lost overboard
- Cargo liability claims
- Damage to ships
- Stability and stress risk for ships
- Risk of personal injury or death for seafarers and shore workers
- Impaired service schedules
- Supply chain delays for shippers of properly declared containers
- Last-minute shutouts of confirmed, booked and available loads when the actual mass on board exceeds what is declared and the total cargo mass exceeds the vessel limit or port draft limit
- Impairment of vessel trim and draft, leading to inefficient use of fuel and a higher level of air emissions
- Liability for accidents and fines for overweight containers on roads with time and effort spent on seeking reimbursement
- Lost revenue and earnings (customs authorities, exports and importers, shipowners).

## WHAT THE SOLAS AMENDMENT SAYS

The actual wording of the amendments to SOLAS Regulation V1/2 is as follows:

*"In the case of cargo carried in a container, except for containers carried on a chassis or a trailer when such containers are driven on or off a ro-ro ship engaged in short international voyages... the gross mass according to Paragraph 2.1 of this regulation shall be verified by the shipper, either by:*

- 1 *Weighing the packed container using calibrated and certified equipment; or*
- 2 *Weighing all packages and cargo items, including the mass of pallets, dunnage and other securing material to be packed in the container, and adding the tare mass of the container to the sum of the single masses, using a certified method approved by the competent authority of the state in which the packing of the container was completed.*

*The shipper of a container shall ensure the verified gross mass is stated in the shipping document. The shipping document shall be:*

- 1 *Signed by a person authorized by the shipper; and*
- 2 *Submitted to the master or his representative and to the terminal representative sufficiently in advance preparation of the ship stowage plan.*

*If the shipping document, with regard to a packed container, does not provide the verified gross mass and the master or his representative and the terminal representative have not obtained the verified gross mass of the packed container, it shall not be loaded onto the ship."*



# Better safe THAN SORRY....

Assessing the risk of an oil spill is a good way to focus your business on staying out of trouble in each of its operations while being well prepared to respond if the worst happens.

**W**hy assess risk. Assessing the level of risk associated with any operation that poses a threat of an accidental release of hydrocarbons into the environment is an important step in being able to recognize ways in which the threat can be eliminated, managed or mitigated for that operation.

**Define risk.** For prevention, preparedness and response activities, risk can be defined as the probability of an incident occurring multiplied by the resulting negative impact or consequences.

**Probability** refers to the likelihood of an incident occurring. It can be determined in general terms or mathematically, depending on the risk assessment context.

**Consequence** measures the impact that the incident may have, which can utilize various environmental and social-economic data points.

Using the above measurements we arrive at the formula:

**Risk = Probability** (of the incident occurring) **x Consequence** (expected impacts resulting from the incident).

These two components of risk must be considered and addressed in order to lower

their values and, in turn, achieve a level of risk that is **As Low As Reasonably Practicable (ALARP)**.

For example, in order to lower the probability component of risk, one could implement a more stringent maintenance and inspection program, restrict transfers to daylight hours or prohibit dual simultaneous transfer operations. As these measures show, lessening the probability of an incident is done by eliminating operations that pose risks or by managing these operations so that the risk becomes ALARP.

## RESPONSE

To lessen the consequence component, one could bolster response capacities by improving oil spill response planning; by making sure that staff receive a high level of incident response training and have the opportunity to practice these skills during frequent exercises and drills; and by correctly managing the type and quantity of response resources available to the operation.

Lessening the consequence component, and thereby mitigating the effects of a spill, is called **preparedness** and forms a key

part of a continuous process of improvement and assessment that runs throughout the operations lifecycle.

**How to assess risk.** To assess the risk of an operation, one can use a qualitative approach, a quantitative approach or a combination of the two.

In the quantitative approach, list the various activities that form parts of the operation, then detail the scenarios that could occur during each of these activities that could result in an oil spill incident.

For example, bunkering a vessel is the operation. Transfer operations from a fueling barge to the vessel using a flexible loading hose is the activity. A resulting scenario could be 'spill caused by loading hose failure' with spilt product type and quantity based upon hose volume, transfer pump capacity and flow rate assessed. Once all these scenarios are listed, score their risk based on a pre-established set of criteria for probability and consequence.

An alternative approach is the qualitative approach, which uses descriptive terms or ranges. The qualitative approach is more subjective and so must be clearly defined for it to be of any value. In the end, whether





**By Michael Roldan**  
Duty Manager, Oil Spill Response Ltd  
Fort Lauderdale, Florida.  
Tel: +1-954-983-9880  
Email: michaelroldan@oilspillresponse.com

qualitative or quantitative, risk scoring produces an ordered or prioritized list of items that may need to be addressed.

### ASSESSMENT

**Next steps.** There is a wide-ranging suite of risk assessment tools available. You will need to do some research to determine which is best for your operation. One option to assess response plans in depth is to use ARPEL's Readiness Evaluation Tool for Oil Spills (RETOS) – found at [www.arpel.org/library/publications/search](http://www.arpel.org/library/publications/search) – which is popular throughout the Caribbean and Latin America.

Another option for a quick overall preparedness assessment is Oil Spill Response Ltd's online risk assessment tool. It pro-

duces an individualized Action Report based on responses that the user can edit for specific needs and can be found at: [www.osrl.cotoco.com/customer/pains/home.php](http://www.osrl.cotoco.com/customer/pains/home.php).

Whichever risk tool or methodology is used, it is always wise to remember that risk management is a continuous and iterative process and that its true value can be found when its results are faithfully addressed.

*\*ARPEL is a non-profit association gathering oil, gas and biofuels sector companies and institutions in Latin America and the Caribbean ([www.arpel.org](http://www.arpel.org)).*

*\*\*Oil Spill Response Ltd is an international industry-funded cooperative which exists to respond to oil spills anywhere in the world by providing preparedness, response and intervention services ([www.oilspillresponse.com](http://www.oilspillresponse.com)).*

---

**For prevention, preparedness and response activities, risk can be defined as the probability of an incident occurring multiplied by the resulting negative impact or consequences**

---



# DOWN

## BUT NOT DEFEATED...

MLPs may be out of favour, but their potential cannot be ignored, says industry expert

The master limited partnership (MLP) investment structure has worked well for risk-averse small investors because its revenue streams are locked in for years and not tied to commodity prices. Some have questioned whether MLPs can insulate small investors from a turbulent energy market. But rumors of their demise have been exaggerated, says industry expert Basil M. Karatzas

**P**ipelines are an interesting type of investment since they require a lot of resources and the whole capital investment upfront, even before a barrel of oil can be shipped. But, once in place, they almost can guarantee to perpetuity predictable cash flows. Every time a barrel passes through the pipeline, a toll must be paid, even when the original pipeline was laid several decades ago.

This pipeline investing model has functioned as a template for the master limited partnerships (MLP) investment structure in the United States, where investors (unit holders) come to expect steady predictable cash flows over long periods of time with relatively little market risk. MLPs are publicly traded partnerships in which small, unsophisticated retail investors can participate, while at the same time being exempt from corporate taxation in the US (corporate profits are passed tax-free to the unit holders, who pay tax at their personal level, thus

eliminating double taxation).

Revenue streams that can be generated from real estate, commodities and natural resources can satisfy the MLP structure and thus many capital-intensive projects related to these industries can be offered to investors on such a basis: pipelines, oil storage and other energy infrastructure; tanker companies, where their vessels are employed under long-term charters with investment-grade charterers. A few notable names in the space are Kinder Morgan, Genesis Partners, Teekay LNG Partners and Teekay Offshore Partners.

### ADVANTAGES

MLPs have distinct advantages because they allow smaller, risk-averse investors to provide finance for costly projects that will pay off for years to come. For investors seeking predictable dividends and yield without taking direct exposure to the underlying markets (mostly energy), MLPs are a solid investment

strategy to consider. On the other hand, for projects where the employment of the assets is 'captive' or assured by a highly creditworthy party, it's a structure with a lower cost of capital that can benefit the consumer, the taxpayer or even a government by allowing services to be offered at a lower cost.

While the business model of MLPs is distinct and independent in its own right, MLPs came to be strongly associated with the energy industry; and often, for right or wrong, MLPs follow the fortunes of the energy industry. Pipelines and the energy industry have been the blueprint for MLPs but, again, just because the price of oil fluctuates and the economic growth of a country can vary, this doesn't mean that oil (or its by-products) stop passing through pipelines. The volumes may vary, but the tariffs are constant. Variance in revenue should not be of grave concern, since the MLP does not have high operating expenses and the assets have long economic lives. Thus, even when revenue drops, the survival of the company is never at risk (minimal opex) and the dividend payout can still be very strong compared with other industries.



**By Basil M. Karatzas**

Chief Executive, Karatzas Marine  
Advisors & Co.

Email: [info@BMKaratzas.com](mailto:info@BMKaratzas.com)  
[www.karatzas.com](http://www.karatzas.com)

So much are MLPs associated with the energy sector that the Alerian MLP Index was down by 40 per cent in 2015, in line with the drop in the price of oil and

Pipelines and the energy industry have been the blueprint for MLPs but just because the price of oil fluctuates and the economic growth of a country can vary, this doesn't mean that oil stop passing through pipelines

versus an effectively flat stock market in that year. The shares of energy MLPs were decimated in 2015 and MLPs in the maritime industry have also seen their shares perform poorly. Again, the revenue streams are not tied in any way to the price of the underlying commodity and the MLPs have revenue streams locked in for years to come; but, nevertheless, their shares have performed as if they were commodities. Some observers have even questioned whether the MLP structure is viable at all since it has failed to insulate the risk-averse small investor from the vicissitudes of the market gyrations.

Proclaiming the death of the MLPs just because of the current market





■ The CSA's 15th Annual Caribbean Shipping Executives Conference is to be held from 16-18 May in Cocoa Beach, Florida.

■ Please contact the CSA Secretariat in Kingston (details below) or visit the CSA website [www.caribbeanshipping.org](http://www.caribbeanshipping.org) for further details about speakers and to register for this key networking event.

■ CSA members enjoy preferential rates. There are also early-bird registration discounts and concessionary hotel rates.




**16-18 MAY 2016**

**PORT CANAVERAL, FLORIDA**



**caribbean shipping association**

**CSA SECRETARIAT:**  
4 FOURTH AVENUE, NEWPORT WEST, PO BOX 1050, KINGSTON CSO, JAMAICA  
TEL: +876 923 34981 · E-MAIL: [CSA@CWJAMAICA.COM](mailto:CSA@CWJAMAICA.COM)

 Find us on Facebook - search: 'Caribbean Shipping Association'

[www.caribbeanshipping.org](http://www.caribbeanshipping.org)

dislocation is likely to be an exaggeration. Disheartening as it is, poor share performance and strong association with commodity pricing cannot be the end of MLPs.

The fact that MLPs may be undervalued at present is a question for the individual investor to consider. Of greater importance is the question of whether the recent performance of MLPs may have a negative impact on new projects seeking financing where the MLP structure could have been a suitable structure. After all, if existing MLPs have not performed well – seemingly for the wrong reasons – what’s the incentive for the general partners to consider new projects? If an MLP-related oil storage facility sees its valuation reflecting the value of the commodity stored instead of the revenue generated from the service of storing, what are the odds that a natural gas facility will have better appreciation by the investors?

The negative impact from the MLPs may be felt disproportionately in markets and geographies that could optimally had benefitted from such structures. Thinking locally, the Caribbean Basin may be a geography that could have seen the benefit from this structure and its cheap cost of capital. As the region focuses on development and preservation, on new infrastructure and environmentally friendly trends, the MLP structure could have been ideal for financing such aspirations. As the region considers turning away from smelly diesel power generation and to natural gas, as the region looks to attract more tourism and trade that will require enhanced port infrastructure, MLPs could be the ideal springboard to finance such projects in the international capital markets. Given that such projects would have a ‘captive’ market of the local consumer, with minimal support from the local government, such energy and infrastructure projects could offer a public good at a cost likely to be lower than the sovereign credit could command.

Likely, as the fortunes of the MLP market caught off guard by the oil’s (mostly unforeseen) precipitous drop, the investors still have to absorb the

game-changing news and the new baseline that the collapse of oil and shale has generated. Eventually investors will make clear the separation between the commodities business (and its risks trading such commodity) with the boring but distinct business of providing services in the commodities market (shipping, transport, storage, etc). For governments, economies and companies that have long-term projects to undertake with long-term assured cash flows, a new wave of MLPs cannot be far away.

## PROSPECT

The prospect of utilizing the MLP platform to finance energy and infrastructure projects in the Caribbean Basin is very enticing from many points of view. First, US residents have been extensively vacationing on the islands of the Caribbean for several decades now, and they are familiar with – besides the exceptional weather – the overall stable political environment in the region and also the business opportunities. Many of these vacationers would stand to benefit personally from any investments in the region via better services; thus, considering investing in MLP energy and infrastructure projects provides them with an opportunity to invest in an area they know and appreciate, and they have the opportunity to make a profit every time they spend money in the region.

Conversely, the MLP platform allows the local governments to access a big and wealthy pool of investors in their backyard in order to obtain inexpensive financing

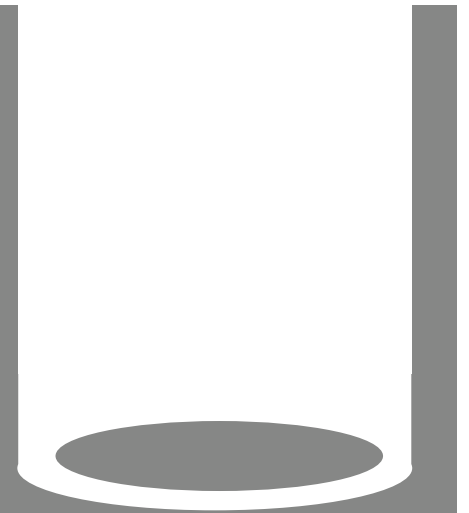
---

The fact that MLPs may be undervalued at present is a question for the individual investor to consider. Of greater importance is the question of whether the recent performance may have a negative impact on new projects seeking financing

---

to build infrastructure and to play on the region’s commercial advantages, including higher tourism revenue from the very same market where the investors come from.

Just imagine the opportunity of power generation plants on a pristine island in the Caribbean that use natural gas as feedstock imported by ship from the United States.



Imagine an improved port infrastructure, with deeper-draft terminals equipped with cranes that could accommodate more efficient ships, thus lowering the cost of transporting material to and from the islands.

And, if one dares to think big, imagine a container transshipment center in the region that would allow large container-ships to discharge containers destined for the US.

Utilizing the MLP platform can be a win-win situation for the local governments and for the local population (consumer and taxpayer), while investors and tourists can go on enjoying sun-kissed beaches without environmental pollution while receiving higher quality services and having the pleasure of seeing their investments at work each time they go island-hopping.





# IF YOU BUILD IT, THEY WILL COME...

'Chicken and egg' of LNG power is about to be resolved in the Caribbean...

By Gary Gimson

**Suppose it's a bit like driving an electric car – all very well in theory, but when it comes to the practicalities of day-to-day ownership the idea is less attractive. Your car is apparently eco-friendly, but the downsides include range anxiety and availability of supply.**

There are some similarities between electric cars and LNG-powered ships, particularly when it comes to availability of supply.

And then there's a more general 'chicken and egg' conundrum, namely, which comes first – LNG-powered ships or LNG bunker stations? Do vessel owners operate a ship when fuel supplies may be a problem? Conversely, do suppliers of LNG invest in expensive bunker stations when there are no buyers for the fuel?

This is the dilemma for the shipping industry.

There is a clear difference between ship and vehicle ownership, however, in that the International Maritime Organization is shepherding operators in the direction of cleaner fuel use, whereas car drivers are heading in that direction almost voluntarily, albeit with the help of generous tax breaks.

And does it make any economic sense to retrofit a ship to run on LNG, especially when the fuel is comparatively expensive and almost impossible to obtain in the Caribbean? And when currently low oil prices make the case for LNG even more difficult.

So for the moment, the answer must be 'No' and MDO remains the best option since new rules were introduced on 1 January 2015 for the United States Caribbean Sea Area. This is one of four IMO-designated emission control areas (EMAs) where the output of sulfur oxides is restricted and which have an

impact on the region's shipping.

But for the time being and in contrast to parts of northern Europe (where there are dedicated LNG bunker barges), LNG supplies are limited in the Caribbean and bunkering points effectively non-existent. Looking just a little ahead, however, the situation is about to undergo a dramatic change, with new LNG bunkering points due to come on stream both in the US Gulf and in the Caribbean.

## LAUNCH

For a start, AES Dominicana plans to launch LNG bunkering services across the Americas using its LNG receiving and storage terminal and fuel handling capability in the Dominican Republic and with gas imported from Atlantic LNG in Trinidad. According to a company statement, the combination of AES Dominicana's ability to procure competitively





priced LNG and its ability to deliver small loads of LNG opens the way to cost-effective gas conversion solutions for smaller-load fuel consumers in the region such as vessels. The company's AES Andres LNG terminal will be ready for reload operations in the third quarter of 2016.

Says AES Dominicana's George Nemeth: "The facility is also located along many shipping routes ideally positioned to provide LNG bunkering services to vessel owners and operators who are increasingly drawn to LNG as a propulsion fuel."

Port Fourchon in Louisiana hosted the United States' first LNG bunkering operation in 2015 from the new Harvey Gulf International Marine facility. Port Fourchon is the largest offshore supply base in the US. The Harvey Gulf facility is multi-use, supplying the company's own fleet of dual-fuel

offshore supply vessels and serving 'over the road' vehicles.

JAXPORT in Florida is set to become another supply point for LNG after Pivotal LNG and the California-based energy group WesPac Midstream formed a joint venture to build an LNG bunkering plant close to the new Dames Point Marine Terminal in Jacksonville. The facility should be in operation in 2016 with a dedicated LNG bunker barge to supply the world's first dual-fuel containerhips operated by TOTE Maritime Puerto Rico.

The hope is that if LNG terminals are supported by truck loading facilities, as is the case at Port Fourchon, as well as for the loading of bunker vessels or the direct bunkering of LNG-fueled vessels, then a basic infrastructure network for the distribution and supply of LNG fuel can be

established, thus ensuring an attractive FOB bunker price for LNG.

This looks to be the path ahead in terms of setting up LNG bunkering across the Caribbean. And the Dominican Republic and ports in Louisiana and Florida are leading the way.

## PAYBACK TIME

"Based on LNG prices indexed to a projected reference oil price of US\$ 100 per barrel, and compared with the use of MGO, the payback time for ships using LNG is between one and three years, depending on specific investment costs, emission control area (ECA) operating time and fuel cost difference."

– World Port Climate Initiative (WPCI)



**Our Services:**

- / LAUNCH HIRE
- / PRIVATE WATER TAXI
- / TRANSPORT OF SUPPLIES
- / MOORING BOAT OPERATION
- / EMERGENCY EVACUATIONS
- / DRYDOCKING OF LAUNCHES
- / VESSEL MAINTENANCE
- / SMALL VESSEL CREWING
- / LAUNCH DESIGN / BUILD / ACQUISITION SUPPORT
- / INTERNATIONAL CREW AND SPARES TRANSFER, (SPECIALIZING IN VENEZUELA TRANSFERS)

Bridge Control Services Limited is an offshore transport company established in 2004. Our client list includes all leading oil and gas firms active in Trinidad as well as transshipment operations and Trinidad & Tobago Pilots' Association. We offer quality service in line with international standards with the aim of remaining the premier service provider in the Caribbean.

P.O Box 1395 King's Wharf Ext., Wrightson Road  
 Port of Spain, Trinidad & Tobago  
 Tel: (868) 671-0751/672-7678 • Fax: (868) 672-4694  
 Email: info@bridgecontrolservices.com

**BRIDGE CONTROL SERVICES LIMITED**

[www.bridgecontrolservices.com](http://www.bridgecontrolservices.com)

**X-PRESS FEEDERS**  
*"The Global Common Carrier"*

X-PRESS FEEDERS is the largest independent common carrier in the world, providing a wide geographical coverage. With no containers of our own, we provide only service and not competition to our customers.

We charter a fleet of nearly 100 vessels (up to post panamax size), of which 21 are owned. X-PRESS FEEDERS operate throughout Asia, Middle East, Caribbean, Central America, Mediterranean and North Europe. 2015 annual throughput is expected to be in excess of 4.8 million TEUs.

We are a privately owned global organisation, employing a team of over 260 dedicated staff to serve your needs. We have fully fledged operation teams in Singapore, Dubai, Bombay, Hamburg, Barcelona and Panama. We have the right people to provide the network, schedules, and expertise to enable our customers to compete with the most reliable services at the lowest possible cost.

X-PRESS CONTAINER LINE PANAMA S.A., P.H. Oceania Business Plaza Torres, Torre 1000 Nivel 40, Punta Pacifica, Corregimiento San Francisco; Panama  
 Direct Line: + 507 214 6321 | [www.x-pressfeeders.com](http://www.x-pressfeeders.com)

---

<b>MCX1</b> LAZARO CARDENAS, MX MANZANILLO, MX PUERTO QUETZAL, GT ACAJUJTLA, SV SAN LORENZO, HN	<b>MCX2</b> MANZANILLO, MX CORINTO, NI CALDERA, CR	<b>PWX</b> COLON, PA BUENAVENTURA, CO GUAYAQUIL, EC CALLAO, PE MATARANI, PE / IQUIQUE, CL SAN ANTONIO, CL SAN VICENTE, CL	<b>WSX</b> BALBOA, PA CALLAO, PE PAITA, PE GUAYAQUIL, EC BALBOA, PA	<b>PIX</b> MANZANILLO, PA CURACAO, AN RIO HAINA, DO CAUCEDO, DO SAN JUAN, PR PUERTO LIMON, CR COLON, PA	<b>CPX</b> MANZANILLO, PA PUERTO LIMON, CR CARTAGENA, CO BARRANQUILLA, CO SANTA MARTA, CO COLON, PA	<b>PCX</b> MANZANILLO, PA FUERTO CORTES, HN SANTO TOMAS, GT BARRANQUILLA, CO COLON, PA	<b>PJX</b> MANZANILLO, PA KINGSTON, JM MONTEGO BAY, JM PORT AU PRINCE, HT PUERTO LIMON, CR	<b>PVX</b> MANZANILLO, PA CARTAGENA, CO LA GUAJIRA, VE PUERTO CABELLO, VE
--	---	---	--	--	---	---	---	---



# PORT SECURITY



At a time when the global terrorist threat remains disturbingly high and when the maritime sector has never been more vulnerable, Caribbean Maritime looks at the vital topic of port security.

- 21 Internal Security
- 23 Complacency
- 25 Narcotics
- 26 Scanners
- 28 CCTV

## PORT SECURITY SPECIAL FEATURE INTERNAL SECURITY

# Keeping out the bad guys...

It's worth investing in a really effective system of port access control

It is a widely held belief that, as you add layers of security to ports, the flow of goods and services will be disrupted. To reduce the potential impact of such security measures, port operators and supply chain stakeholders should seek ways to better integrate security systems into their operations.

Louis Noriega reports.

**In addition to keeping Caribbean goods on the move, ports also help keep the Caribbean economy on the move. Port activity contributes substantially to the GDP of the islands while creating port-related jobs that generate significant annual personal income which contributes to the tax base.**

This important industry must be safeguarded in order to prevent criminal activity from infiltrating the operations. It

must not be allowed to become a social ill to the community it serves. Ports present an attractive target for developing criminal conspiracies due to their component role in national and local economies. They contain important assets and infrastructure which if damaged could cause significant loss of life, a negative impact on the economy and the environment. Criminals look for ways to cripple local, regional and national economies.



## PORT SECURITY SPECIAL FEATURE INTERNAL SECURITY



It is the responsibility of us all to keep it safe and secure and to tightly integrate physical security processes and systems into day-to-day operations without disrupting passenger operations, commerce, international trade and recreational and tourist-related port business. Port operators, manufacturers, shippers and other stakeholders in the supply chain are focused on maintaining the flow of commerce, while law enforcement, security personnel and governing bodies emphasize the need for heightened security.

### SOLUTIONS

Several high-technology solutions are currently available that can significantly ease the screening process. These include electronic access control with anti-piggy-backing capability, video management and analytics, waterside surveillance, fenced line protection, emergency call systems, intercom, law enforcement automatic license plate reader systems, web intelligence, domain awareness and incident management (both operational and security), mass notification, autonomous vehicles and cargo gate entry and exit systems, all managed from a joint operational and security command center.

As the basic function of security is to protect the target environment from harm, this effort must be founded on an effective regimen of control over who and what will be permitted to enter or approach the environment.

Access control infrastructure must strike the right balance between efficient throughput and knowing precisely who and what is coming in or going out. Even in residential settings, access is controlled by developing best practices to screen those desiring to enter. When the doorbell rings, the resident wants to know who is there before opening the door. Children are taught to practice good security and safety when they are alone or when someone knocks at the door. If unfamiliar third parties are permitted entry, then hopefully they have been pre-screened to ensure there are no risk factors in their background that portend some future harm.

Similarly, by instituting controls to identify, screen and monitor people and vehicles entering and exiting ports, a major layer of security is added to mitigate the vulnerabilities of the 'open systems' nature of seaports.

Two major components

essential to comprehensive port access control are identification and credentialing; and restricted or controlled area access controls.

Identification and credentialing is the process that provides seaports with a systemic way to identify and control who has authorization to enter a seaport.

Restricted area access controls comprise physical infrastructure, procedures, systems and guidance for screening, monitoring and controlling access into and out of the facility. The primary methods for restricting access – such that those with criminal intent are excluded – are to identify them before access is granted and to screen them during access.

### ACCESS

Those who access the port most frequently may develop an intimate knowledge of port operations and geography, including knowledge of security systems, guard forces and access controls. It is imperative that the port knows who is entering, what they are bringing with them and why they are entering.

People intent on exploiting ports to conduct criminal activity will use their knowledge of ports and their operations to find weaknesses in their security systems. Advance notice of arrival of vessels, trucks, visitors, crew members, passengers and cargo is another dynamic that provides port security management with a useful tool for mitigating the port's access vulnerabilities. The issuance of a photo identification credential to each person authorized access (temporary or permanent) is a

key component of port access control. Individuals must be required to possess and display a photo identification credential at all times when accessing or working within port restricted access areas. Fingerprints and criminal history background checks are especially important to consider with a view to filtering out and denying access to those with a criminal propensity. In the United States, all persons requesting access to restricted areas of a seaport are required to submit to an electronic background check, while in the United Kingdom airport employees who work in restricted areas must undergo a criminal background check.

The credential should be an electronic access control card which can allow the addition of a biometric (methods for uniquely recognizing humans based on one or more physical traits such as fingerprints, voiceprint identification, palm, retina and others) captured during card issuance and stored on a smart chip (similar to credit cards) that can be matched to the physical trait of the person requesting access. This technology significantly increases positively matches the card to the person and makes it very hard to create a fraudulent card.

Access control systems represent that component of port security in which the port facility security officer makes determinations as to what people, vehicles and materials will be permitted to enter the seaport. Access controls include – but are not limited to – requiring identification cards and visitors, requiring advance notice of delivering and the







screening of vehicles, pedestrians and cargo.

Restricted areas secured by access control must be defined so that all people are aware of areas where only those with proper credentials are permitted access. Restricted areas should include:

- Cargo storage or staging areas
- Docks, berths and wharves
- Fuel storage or transfer yards
- Passenger cruise and ferry terminals.

These areas should be protected by physical barriers and electronic protective measures such as biometric readers, cameras, gates, sensors and analytics as well as other technologies that a seaport can integrate into its processes and systems to improve security and its operational processes.

It would behoove port executive management to reach out to an operations and physical security technology consultant with substantial experience of seaports and cargo terminals to create an operational and physical security technology master plan to develop a roadmap to achieve operational efficiencies and expedite the flow of commerce while also securing this most important asset of our national economies.



# Complacency: the greatest terrorist threat of all

## Caribbean region in danger of letting its guard down when it comes to port security, says expert



**By William Lusk**  
Director of Operations,  
Homeland Security Outlook

**Reading articles and watching television, all can agree that terrorism has lately dominated the headlines. ISIS was responsible for a shooting spree in Paris, violence persists on the US/Mexican border and scores of cruise passengers were killed in an attack in Tunisia.**

The Caribbean region is not immune. The websites of Caribbean governments have been hacked by Middle Eastern militants and the Caribbean Sea is used all too often as a conveyance to traffic people, drugs and weapons. Incidents of piracy and armed robbery, although rare, do still plague the Caribbean. Despite these high-profile challenges, our greatest threat, complacency, is setting in.

Perhaps the biggest indicator of complacency can be measured in dollars and cents. One example is the dwindling Port

Security Grant Program (PSGP), designed to build and sustain the security and resiliency of ports in the United States. These funds, distributed by the Federal Emergency Management Agency of the US Department of Homeland Security, can be used for wide-ranging purposes such as training and exercises, response vessels, detection equipment, sensors like cameras and radar, and more.

The chart below details the amount made available per fiscal year:

FISCAL YEAR	PSGP AMOUNT AVAILABLE
2015	US\$ 100 million
2014	US\$ 100 million
2013	US\$ 93.2 million
2012	US\$ 97.5 million
2011	US\$ 235 million
2010	US\$ 288 million
2009	US\$ 388.6 million
2008	US\$ 388.6 million



Not only is the size of the financial pot shrinking, but smaller ports and law enforcement agencies must now compete directly against larger ports and agencies, unlike in years past. Further, much of the equipment purchased in 2008's Port Security Grant Program allocation now needs repair or replacement, although funds are no longer available to do so.

The financial effect is far-reaching, and now the US government is incapable of enforcing its own port security laws. For example, the Safe Ports Act of 2007 mandates that all cargo containers bound for the US must be screened for radiological and nuclear material by 2012. Since the 2012 deadline, DHS Secretaries Janet Napolitano and Jeh Johnson have waived this requirement because it is too expensive to implement, costing as much as US\$ 12 billion by some estimates.

Like ports, militaries and law enforcement agencies are not immune to budget cuts. Admiral Paul Zukunft, Commandant of the US Coast Guard, said: "We have actionable intelligence on approximately 90 per cent of known maritime drug movements. However, with too few surface and air assets to patrol the vast expanses of the transit zone, they can only attempt to target, detect and disrupt 20 per cent of that known flow. You can do the math – it is an issue of capacity."

## PROPOSED

In Mexico, it has been reported that the proposed 2016 budget slashes its local law enforcement budget by approximately US\$ 172 million. National law enforcement in Mexico is also being hit hard by austerity measures. Alejandro Hope, the security and justice editor of 'El Daily Post', wrote of the Interior Ministry (Secretaría de Gobernación): "Gobernación as a whole has had the



investment side of its budget cut by 77 per cent. It is under Gobernación that almost all federal public security programs are operated."

The Hon. Colm Imbert, Minister of Finance of Trinidad and Tobago, was candid in recent remarks about the nation's maritime security assets. In his 2016 budget statement, Minister Imbert said: "When we came into office last month, we met a mix of naval assets hastily ordered and delivered for public relations purposes just before the 2015 election – not fully outfitted, without armaments and without proper financial arrangements in place. In local parlance, we purchased these new vessels on trust."

Shipping lines and terminals are businesses just like any other, with shareholders and investors to answer to. Security investments like radars, cameras, fencing, guards and others are very expensive to buy, train with and maintain as necessary. Private-sector executives, facing budget cuts just as governments in the aforementioned cases, may rhetorically ask about the return on investment for security acquisition

beyond minimums called for by government and ISPS regulations. It is impossible to measure the return on investment of security assets until a catastrophic event actually does occur. When a calamity happens, natural or man-made, the investment in security technology and/or training then becomes priceless to minimize the loss of life, property and time to resume continuity of operation.

## BLESSED

The maritime community in the western hemisphere has been blessed in that no significant terrorist attack has occurred in vessels or ports. In letting our guard down by becoming complacent and unwilling to invest resources in security, the Caribbean maritime community will become no safer and prepared for terrorism than aircraft on 10 September 2001.

Risk can be defined as a simple mathematical formula: threat x vulnerability x consequence. With Caribbean islands so small and reliant on maritime commercial traffic for energy, food, trade and tourism, any terrorist attack would have enormous consequence for the island or islands involved. The threat to the Caribbean is present. However, we, the maritime stakeholders, have control over our vulnerability. Will we properly invest time and resources to lower our vulnerability? In doing so, we lower our risk and complacency.

---

**In letting our guard down by becoming complacent and unwilling to invest resources in security, the Caribbean maritime community will become no safer and prepared for terrorism than aircraft on 10 September 2001**

---





# Who's using your tender tonight?

Security gaps make super yachts a target for smugglers

With mega yachts using port authorities more and more frequently for transient mooring, the leisure marine sector can often be overlooked as the unique security plan standards of these boats are not as regulated as those of commercial ships. Brian Kane reports.

**S** mugglers know that leisure yachts are not as rigorously vetted by port security as commercial vessels. While leisure crews have 24/7 watches, the crews need to be better aware of the tactics smugglers are using to get illicit goods on leisure boats, whether it's bolting a parasitic container to the stern or bribing crew members at the local bar to allow access to the boat during a scheduled open security window later that night.

With many of these yachts often doing charters, there is a lot of information already out there for anyone to Google a boat's capacity, layout, toys, ownership, crew members, etc. This information is extremely valuable to smugglers in finding the softest mega yacht target available.

Often, too, these yachts have fast center-console tenders tied off to their side. It is not uncommon for tenders to disappear in the middle of the night, often never to be seen



again. Triple 350 hp engines on the back of a 35 ft stolen boat can haul a lot of humans or illicit goods in and out of countries. Leisure marine crews need to be more aware of threats that both the mega yacht and its toys face. Having security sensors and theft deterrence solutions installed can go a long way to preventing you becoming a victim, while keeping the whole crew aware of everything that is happening on board.

## SOLUTIONS

These solutions can allow the captain to keep tabs on what his crew and guests are doing as well. Smugglers monitor the fuel docks closely and know which fast tenders have a full load of gas on board. Often, when the boat is stolen, it is cut free from the mega yacht at night, allowed to drift away and then towed off by a skiff to a discreet area. The criminals will then board the boat to find and try to eliminate any security sensors and tracking systems, cut the T-top off to reduce radar signature and weight and load up additional fuel bladders or barrels in preparation for their journey.

If the boat is found while under way during an active smuggling operation, the smugglers will often place their human cargo (and sometimes themselves) in front of the engine cowlings to prevent the blocks from being shot out while being chased until the boat gets to its final destination. Insur-



**By Brian Kane**  
Director of research and development  
Global Ocean Security Technologies

ance companies are often making security and tracking systems mandatory to bind coverage on many go-fast leisure boats.

Outside the leisure marine side, another area in which we are seeing increased demand from our commercial maritime clients is monitoring doors for unauthorized openings on sealed containers and the exact time and location it occurred. Our customers are in need of a self-contained battery powered satellite tracking system with a basic door contact to provide global situational awareness.

The issue, of course, is that containers on ships have no power source, so this independent long battery life solution is the only real option to monitor.



SMS messages and emails are sent out for door openings and door closings and if it has moved out of a predefined geofence. This is valuable information for fleet managers to let them know if the asset or its goods have been compromised. It is also a silent alarm with no local sirens that go off, so it's possible to catch the perpetrator in the act. These mission-critical terminals have a rechargeable battery that can report as often as every five minutes or just once a day with an inverse relationship to reporting cycle and battery life.

These tracking systems operate over the Inmarsat geostationary satellite network and have a 99.9 per cent messaging reliability and efficiency to meet IMO standards.



# Cool handling of 'hot' goods

How to detect radioactive materials in transit without causing a fuss

By Kimberly Prono

**N**uclear terrorism is a real threat. In April 2014 the Ukrainian security service seized 1.5 kg of radioactive material possibly containing uranium-235.

Unfortunately, the incident in Ukraine is not unusual. In the past 22 years almost 2,500 incidents of trafficking radioactive material have been reported to the International Atomic Energy Agency (IAEA) by member states. And these are only the cases that have been formally reported.

Special nuclear materials such as uranium and plutonium are used in sophisticated nuclear weapons. However, a small quantity of radioactive material that is routinely and safely employed in medical and industrial applications can cause significant radiation contamination to a wide area when part of a dirty bomb. Therefore, radioactive material that has been lost, stolen or improperly disposed of is a threat.

Another major risk is contamination by 'orphan' radioactive sources, which get mixed with scrap metal. Consider the discovery in July 2010, during a routine inspection in the Italian port of Genoa, of a cargo container filled with nearly 23,000 kg of scrap copper that was emitting gamma radiation at a rate over 160 times the average annual human exposure to natural radiation. After more than a year in quarantine on port grounds, the container was dissected using robots and Italian officials discovered a rod of cobalt-60, only 23 cm long and 0.8 cm in diameter, intermingled with the scrap. They suspected its provenance to be inappropriately disposed of medical or food-processing equipment. Fortunately, the radioactive source was detected in time before it was melted with the scrap metal and produced radioactive products with associated significant economic damage

and public health concerns.

Seaports have a mission to move freight and people through the port quickly and safely. In doing so, they face a range of possibilities to encounter radioactive material. Thousands of cargo containers transporting a wide range of goods pass through the port. Cruise terminals deal with supplies, passengers and baggage. At ports the challenge is to detect radioactive materials efficiently without slowing down the flow of commerce, be it goods or people.

## COUNTERING

Radiation detection products are valuable tools to assist in countering these threats. The UK company Rapiscan Systems Ltd, an industry leader in security screening equipment, has deployed thousands of radiation detection products around the world to detect illicitly trafficked radioactive and nuclear materials. Rapiscan's radiation portal monitors passively inspect vehicles, trains, cargo, people and packages during transit. If radiation is detected, the system immediately alarms with a flashing light and siren to alert a nearby inspector or covertly alert officials in a remote control room, who monitor detections via closed circuit television.

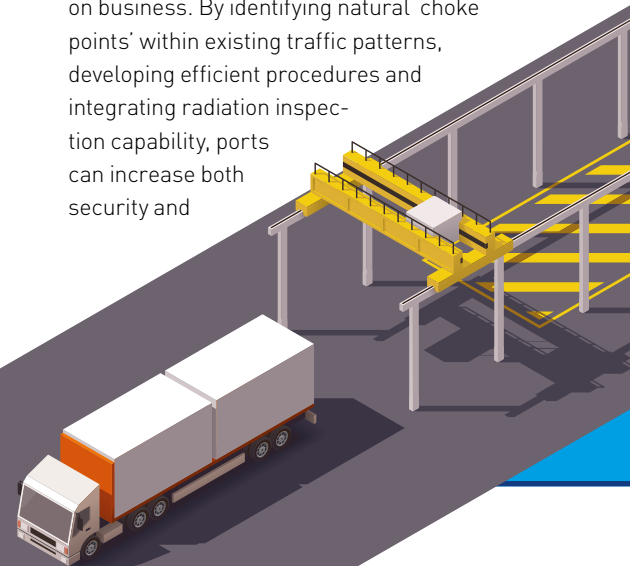
In the Caribbean region, ports in Colombia, the Dominican Republic, Honduras, Jamaica, Mexico and Panama have Rapiscan's TSA radiation portal monitors (RPMs). These countries are part of an international effort to deter, detect and interdict illicit trafficking in nuclear and other radioactive materials within and across international borders and through the maritime shipping system. The same approaches currently used for radiation inspection of cargo containers at seaports can be expanded to cruise terminals as well. Remember, only a small quantity of radioactive material is needed for a

dirty bomb, so it could be included in supplies being delivered to a cruise ship. Just as easily, a radioactive source could be carried in a person's pocket, purse or backpack and appear as a non-threatening object like a metal button or coin.

To help scan crowds, mobile and transportable radiation detection systems can inspect large areas around a site for radioactive threats. For example, in an arrivals or departures terminal, security personnel could walk around wearing backpack monitors, which covertly scan for radiation. Additionally, when people pass through a security checkpoint, they can be simultaneously checked for radiation and metal while their baggage is scanned for radiation and screened by X-ray. This multilayered solution discreetly and efficiently increases the safety of the people boarding a ship. And after crowds depart, all of the radiation inspection equipment can be easily removed and stored for future use.

## CAPACITY

Let's keep global commerce in motion. Seaports want to maximize their throughput and capacity to increase productivity and profit, so time and space are very valuable. Increasing security can be viewed as an obstacle to achieving these goals, but it does not have to have a negative impact on business. By identifying natural 'choke points' within existing traffic patterns, developing efficient procedures and integrating radiation inspection capability, ports can increase both security and







# Look before you leap...

It's well worth doing your homework before investing in a maritime surveillance system

By Daniel Morehead

**D**rawing on more than 100 collective years in the maritime security domain, OCEANS LLC – a firm of Subject Matter Experts working for various governments, research academic institutions and private companies – has witnessed a multitude of systems, integrators and designers all promising to solve surveillance problems.

The reality for clients is that the only 'problem' that is generally solved is salespeople making their quota off the back of companies needing the surveillance. That is not to say all maritime security companies are out to sell you a system you don't need, but they are out there. As maritime professionals, there are steps you can take to guard yourself against a costly long-term mistake for you and your company.

## 1. Determine your specific needs and possible future requirements

Once you've determined your need to purchase or upgrade your surveillance system, it is imperative that you specify



the exact requirements you wish to fill. These requirements are derived from operational locations, known threat profiles and often legal statutes. Your specific requirements should act as the gatekeeper for any would-be vendor. Without specifying these requirements to potential contractors, you will likely find that they will create your requirements – and, surprisingly, they will be the only ones that can fulfill that requirement. Funny how that works out!

By far the best sources to help you determine your needs and requirements already exist in your sphere of influence. If you are managing shipping companies, call your captains for input. Ship captains generally have strong

As maritime professionals, there are steps you can take to guard yourself against a costly long-term mistake for you and your company

throughput without increasing the footprint or personnel requirements of a checkpoint.

For example, in 2009 the Port Authority of Puerto Rico chose to work with S2 Global Inc, a strategic partner of Rapiscan Systems, to provide security scanning services that include Rapiscan cargo equipment, continuous training and maintenance, integration and networking and operation and image analysis to mitigate the import of narcotics, arms and other contraband or undeclared goods. S2's comprehensive security screening solution provides a high-throughput site that can scan up to 100 per cent of imported cargo, making the Port of San Juan compliant with US-mandated screening processes and enabling the tax authority to collect correct revenues. As this case demonstrates, ports can work together with industry to dramatically increase their screening capabilities to address security, economic and public health concerns by using the latest inspection technologies.

Rapiscan offers a number of comprehensive security inspection products that can be closely integrated with radiation detection to achieve seamless and powerful inspection capabilities. Such products can be deployed in a practical security solution that meets seaports' technical and operational requirements and addresses the myriad threats they face. Together we can safely keep global commerce in motion.





opinions on what exactly they need for safe passage as well as preferred system usability. If you are managing landside port operations, contact your local law enforcement. Often-times they will be willing to come and survey your system and make unbiased recommendations as to your specific needs.

Non-profit groups such as Save Our Seafarers and ASIS are also great organizations that can connect you to specific resources. The key thing to remember is to utilize your resources, especially the ones that don't have a vested financial interest in you buying the next greatest and untested widget that will magically solve all your needs.

### 2. Involve your acquisition department at every possible step

Accountants are not security officers and vice versa. However, interfacing and working with your accounting department can severely increase the chances of drafting a successful Request For Proposal (RFP). Engineering change orders, maintenance contracts, software licenses; these are all things that can explode your budget without much effort. It is imperative that, during the RFP formulation process, these hidden costs are brought to light, negotiated and understood. Maritime security is not a profit-maker to accounting and manage-

ment; however, we all understand the costs of neglecting this expense. Companies that enter into the acquisition process with an eye towards True Cost to Own generally do not experience the yearly budgetary battles of maintaining their systems.

A fully engaged and involved acquisition department can also be your strongest asset in ensuring successful project management of whichever system you ultimately select. When payment of services to vendors is tied very specifically to deliverables such as work breakdown structures, installation plans, 'as built' drawings, etc, the quality of service and vendor responsiveness tends to increase dramatically. Again, funny how that works out!

### 3. Remember: 'can' is not 'has'

One of the largest feature-creeping, budget-busting landmines that OCEANS LLC has seen in both commercial and governmental sourced security and surveillance systems is when clients unknowingly asks vendors: "Can you do (fill in the blank)?"

The answer to this question will always be a resounding "Yes!" And in all fairness, given enough time and money, the answer is always yes. However, in the reality of constrained budgets and over-eager vendors, the more applicable question to ask is "Have

you done this before?" to be followed up with: "Has this proposed technical solution been deployed in this configuration before?"

If the answer is no, then you should realize you are not getting the promised 'turnkey' solution; you are buying a science project. And unless you are in the research and development business, a science project probably isn't what you want. Science projects have a strong tendency to severely blow out your project's budget well before the system is handed over. If the answer is yes, however, the very next step is to call up that company or agency and ask them for a referral from someone who actually operates the system. Management usually only hears about systems when they are broken. If, however, the system is not being utilized because the operators find it too confusing or unresponsive, management sometimes assumes that it must be working great. After all, it isn't hearing any complaints!

There is a saying in the maritime and port security world that once you've seen one port, you've seen ONE PORT. This speaks to the truth that every installation is going to have its own specific challenges. However, mitigating the amount of specialized software development, unique integration scenarios and exotic technological solutions will ultimately help reduce the risk of your system becoming so specialized that you become tied, technologically and financially, to only one supplier, vendor or integrator for the life of the project.

This list is not all-inclusive, of course. There is a myriad of potentialities that must be taken into consideration while navigating the selection process for security systems. OCEANS' hope is that, by employing some of the information in this article, you can avoid some of the more common selection mistakes and ultimately acquire a strong requirements-driven solution that will be an asset to your organization for the long term.

### Fair winds and following seas, shipmates!

Daniel Brent Morehead is CEO of Ocean County Engineering & Applied Nautical Services LLC  
Email: [daniel@oceansllc.net](mailto:daniel@oceansllc.net)  
Web: [www.oceansllc.net](http://www.oceansllc.net)





# Martinique to host key logistics trade fair



**The first Caribbean Transport and Logistics Trade Fair (CTLF) is being held in Martinique from 11 to 13 May at the island's Madiana Congress Center.**

This landmark event is being organized by Cluster GAT Caraïbes Logistique et Transports, a non-profit organization based in Martinique and created in late 2012 to bring together private and public-sector stakeholders from across the greater Caribbean region with supply chain interests. The event will involve some 100 exhibitors from across the region and is expected to draw between 5,000 and 8,000 attendees.

Cluster GAT Caraïbes provides a neutral framework for dialogue and cooperation for those in transport and logistics and the forthcoming trade fair is an obvious and long-needed extension of the organization's original aims and ambitions.

Organizers are quick to point out that, although the show is being hosted in Martinique, CTLF is not a francophone gathering but one for the whole Caribbean, irrespec-

tive of language group. Accordingly, CTLF is expected to bring together and showcase various players from the region including those involved in transportation, warehousing, freight forwarding, information systems, import and export consultancy, infrastructure development, logistics and training.

## MEETING POINT

As a member of the European Union Customs Union, Martinique (and, indeed, Guadeloupe) sees itself as an ideal meeting point between the Caribbean and European markets.

The show comes at a time when the region's logistics and transportation sectors are set for change as the enlarged Panama Canal opens and new Caribbean ports come on stream. It is the dynamic between the handful of large transport hubs and sub-regional ports that has made logistics so compelling.

The many impressive and diverse partners in CTLF include the Caribbean Shipping Association (CSA), the University

of the West Indies, Trinidad's Arthur Lok Jack Business School, the French logistics giant SDV, the Dominica Manufacturers' Association, the local company Transmation, Martinique Aimé Césaire International Airport and the Port Managers Association of the Caribbean (PMAC) as well as carriers Soreidom and Caribbean Line.

As the organizers state: "In a globalized world and with increasing competition, the development and efficiency of logistics and transport activities are real performance and development levers for the entire region."

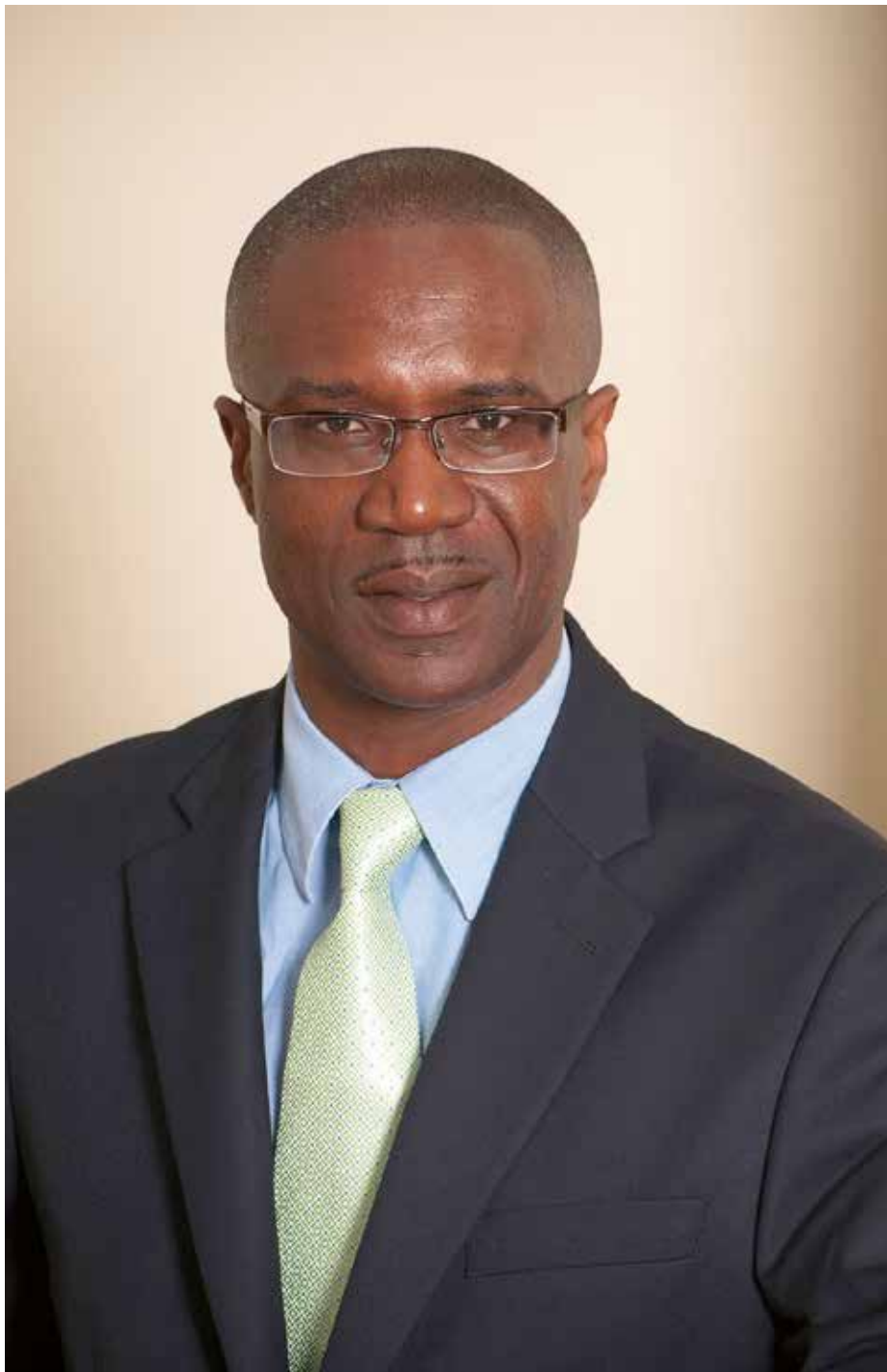
And that is why all those connected with the sector should make a point of being in Martinique in the second week of May.



# OPPORTUNITY KNOCKS

## for our modernized port system

President vows to build on CSA strengths to encourage region-wide collaboration



The new President of the Caribbean Shipping Association, David Jean-Marie, believes there is huge potential for the Caribbean region to capitalize on the major changes taking place in global trade flows and key shipping routes. He tells 'Caribbean Maritime' about some of his personal views and ambitions for the industry.

**L**ike his immediate predecessor, Grantley Stephenson, the new President of the CSA believes that confidence in the future of the Caribbean maritime sector is fully justified. David Jean-Marie says the increase in world trade in both advanced and emerging economies should have a positive impact on the global supply chain and thus open up new opportunities for Caribbean shipping.

**Q:** Which ports and terminals are crucial in attracting new and higher levels of cargo traffic?

**A:** Panama, Brazil, the Dominican Republic, The Bahamas and Cuba are moving full steam ahead given the anticipation that the region's deepwater ports will become significant transshipment logistics centers and



hubs for international commerce.

Also, Jamaica's shipping industry is strategically positioned to capitalize on the opportunities expected from the completion of the Panama Canal expansion. While Kingston is viewed as being ideally poised to facilitate the transshipment of US-bound cargo, it is also positioned to expand its role as a hub for transshipment to the Caribbean and South America.

**Q:** Where do the most difficult challenges lie – and what aspects of the current trade system need to be strengthened?

**A:** While there exists great opportunity for growth in Caribbean logistics, there are important challenges as well for the major hub ports of the region. According to assessments by the World Bank, there are a number of factors yet to be resolved including the quality of trade and transport-related infrastructure, the efficiency of customs processes, the ease of arranging competitively priced shipments, the quality of logistics services, the ability to track and trace consignments and the frequency with which shipments reach consignees within the scheduled time.

There is merit in Jean-Paul Rodrigue's recent assessment of the Caribbean transshipment market, which points to some key vulnerabilities of intermediate hubs in the Caribbean. These include:

1. A narrow focus on transshipment only
2. Competition in basic resources such as location, nautical accessibility, terminal infrastructure and on-terminal productivity
3. Sources of competition can easily be imitated by competitors, thus making it hard to create a sustainable competitive advantage.

We need to consider how we can all leverage our collective operational knowledge and best practices from one port to another to our mutual advantage in order to maximize our benefits as a region in the post-Panama Canal expansion era.

**Q:** What would you personally like to achieve as CSA President over the next three years?

**A:** I will be able to build upon a strong foundation that has been put in place by the leaders of CSA who went before me and were instrumental in building the association into what it is today. It is through their efforts and vision that the CSA has been placed on a solid footing.

I reiterate a point I made at the last CSA AGM in Cartagena: the Caribbean is no longer a sleepy place and the CSA after 45 years will have to reinvent itself. The CSA has a pivotal role to play in all facets of

those in Puerto Rico, the University of Trinidad and Tobago, the University of the West Indies and the Caribbean Maritime Institute in addressing the changing environment.

We also want to further strengthen the collaboration with other regional institutions such as the Port Management Association of the Caribbean, the OAS, the Association of Caribbean States and others in Central America and the wider region as we tackle a globalized world. We are operating in a world in which our business environment



---

## While there exists great opportunity for growth in Caribbean logistics, there are important challenges as well for the major hub ports of the region

---

shipping in the region as a "world-class and sustainable premier regional institution" and I am committed to working assiduously towards ensuring this, while upholding and respecting our CSA traditions.

We intend also to strengthen the role of the CSA as a regional 'think tank' and to speak out on emerging issues and become more that regional voice.

As its new President I am committed to continuing to expand the training opportunities for all our members as we continue to partner with regional institutions such as

is constantly evolving and creating new paradigm shifts, new industry standards and new forms of competition. Recent changes in global container shipping and port organization have forced us all to re-strategise, to rethink and re-engineer our organization's business models for greater flexibility in order to successfully navigate the way forward.

I will be encouraging national associations to present their needs to General Council and to recommend ways in which the CSA can play a more dynamic role in

Our members;  
**SHIP AGENTS:**

- EHS Freightliner Ltd.
- Blue Waters Shipping Ltd.
- Massy Shipping Services
- Cargo Solutions International (Barbados) Ltd.
- Commercial Services Ltd.
- Massy Trading
- Eric Hassell & Son Ltd.
- Fast Transit Shipping Ltd.
- Goddards Shipping & Tours Ltd.
- Marine Trading Ltd.
- Ocean Air Transport Services Ltd.
- Platinum Port Agency Inc.
- Renewals Inc.
- Robulk Agencies Inc
- Seafreight Agencies & Stevedoring Ltd.
- Windward Agencies Ltd.

**STEVEDORING CONTRACTORS:**

- Massy Shipping Services
- Cargo Handlers Ltd.
- Eric Hassell Shipping Limited
- Goddards Shipping & Tours Ltd.
- Marine Trading Ltd.
- Seafreight Agencies & Stevedoring Ltd.

**SPECIALIST ONSHORE SERVICES:**

- Bico Ltd. – Warehousing and cold storage

# Our depth of experience is our greatest strength

**THE SHIPPING ASSOCIATION OF BARBADOS**

2nd Floor, Trident House, Broad Street, Bridgetown, Barbados

Tel: (246) 427 9860 • Fax: (246) 426 8392

Email: [info@shippingbarbados.com](mailto:info@shippingbarbados.com)

[www.shippingbarbados.com](http://www.shippingbarbados.com)



© land&MARINE 2017

# land&MARINE

INSPIRING | CAPTIVATING | INFORMATIVE

Multi-platform publishing and design services



[info@landmarine.org](mailto:info@landmarine.org)

[www.landmarine.org](http://www.landmarine.org)





assisting each territory to develop their maritime services to a high standard of efficiency.

This year will not be without continued challenges which the CSA is fully prepared to tackle head-on. However, I am confident that we are equipped with the requisite levels of astuteness and agility needed to weather the storm and to take advantage of the opportunities that are certain to appear on the horizon.

**Q:** On the human resources side, are there areas where you would like to see a fresh approach?

**A:** The key to our transformation resides in our people, whose expertise is critical if the region is to consolidate its global position as the hub for major trade routes and tourism activities. We must continue to help define and clarify the changing world in which our members' businesses operate by educating their people.

This association has a specific niche to fill in terms of creating the next generation of Caribbean maritime, port and logistics experts who are so highly trained that they will be sought by international employers, not just those within the region. We must prepare our people for the demands and expectations of this dynamic industry. With all the advances in port infrastructure and global shipping, we at the CSA must continue to act as a training conduit that will create the next cadre of industry experts.

In 2014/15 we accommodated a record 228 trainees in our various training programs. In our most recent offering on Cruise Tourism in September 2014 a record 103 highly motivated persons attended the two-day workshops in Antigua. Eighty-two per cent of those who participated in the course, which was facilitated and endorsed by the Caribbean Maritime Institute, rated it as excellent and highly relevant to their jobs. This demonstrates that the CSA is indeed providing a highly demanded service in the provision of modern training opportunities.

It could not happen without the generosity of our sponsors and partners, who are increasingly willing to fund these short training programs we offer. In fact, last year we attracted powerful partners like Bromma, DP World, the University of the West Indies, the Caribbean Maritime Insti-



---

**With all the advances in port infrastructure and global shipping, we at the CSA must continue to act as a training conduit that will create the next cadre of industry experts.**

---

tute and the Port Management Association of the Caribbean.

I am even more gratified by the positive response of our members to appeals for financial support of our Training Fund. Because of their generosity, the CSA has been able to provide our scholarships and low-cost – and in most cases free – training opportunities. We owe a great deal to our members for the increased levels of monetary assistance provided toward the training programs.

**Q:** Is this a useful time to take a look at the management structures and operational methods in Caribbean ports?

**A:** The viability of shipping can only be guaranteed by highly trained, skilled and knowledgeable seafarers and land-based maritime professionals. We at the CSA continue to demonstrate our commitment to industry-related training by offering courses at little or no cost to ensure capacity-building among skilled employees across the region.

Caribbean facilities have capitalized on opportunities to establish themselves as transshipment hubs for the region. Transshipment has always seemed very attractive to Caribbean ports because it adds cargo to

the local trade, making otherwise uneconomical operations profitable and infrastructure investment more viable.

The case for collaboration among Caribbean port operators is stronger than ever. To quote my predecessor, Grantley Stephenson: "The harsh reality is that all of us will not win at this game of port-centric logistics and value-added services development. There will be a need for some larger and profitable players in transshipment. There is room for some world-class performers as nodes in the global supply chain. But this will not be the answer for all our economies."

Caribbean countries should expect to see an increase in third-party logistics providers, carriers, brokers, financiers and technology providers as the trend toward transportation and logistics outsourcing will only grow, predicated by a need for demand responsiveness, redundancies in supply chains and market agility.

Caribbean ports need to develop a strong network, acknowledging each one's competitive advantage and possibly cooperating to direct cargo/commodity routes. This kind of alliance doesn't really exist among our ports, even though they certainly exist among lines. It may be time that we started creating some alliances of our own.

# PORT BRIEFING

## AMBER COVE OFFICIALLY OPENED

Carnival Corporation officially opened its new Dominican Republic cruise port at Amber Cove on 6 October 2015 with a call by the 'Carnival Victory'. Covering 25 acres, the US\$ 85 million complex is said to be the largest port project in the Caribbean for a decade. Carnival has scheduled 140 calls by 23 ships in the first year. The port's opening marks a return by the cruise industry to the republic's northern coast, which has received no cruise calls since the 1980s.



## CAYMAN ISLANDS CRUISE FACILITY A STEP CLOSER

The Cabinet of the Cayman Islands has confirmed that the development of a US\$ 150 million cruise facility in George Town Harbour will go ahead despite very vocal objections from environmentalists. This will allow larger vessels to call at the port. Currently, all cruise passengers are brought ashore by tender. The new project includes substantial dredging and construction of two piers to provide berths for four large cruise ships, with additional reclaimed land for shoreside facilities. The Diving Equipment & Marketing Association (DEMA) said the work would devastate the natural coral reefs and destroy the islands' main tourism sites.

## PORTMIAMI DEEPENING PROJECT COMPLETE

A US\$ 220 million project to deepen the harbor at PortMiami to 52 ft (15.84 meters) was completed in September 2015. This will enable the port to handle fully laden post panamax vessels once the Panama Canal expansion work is completed in 2016. Miami is one of several ports carrying out such work to be ready in time to attract the vessel traffic. The outer harbor was widening to 800 ft (243.8 meters), while parts of the inner harbor were also widened and deepened to 50 ft (15.24 meters). Over 5 million tonnes of spoil was removed from the harbor.



## REEFER CARGO HUB ON WAY AT LIMÓN-MOIN

The Costa Rican port of Limón-Moin is to become a regional hub for perishable cargo in reefer containers. Costa Rica is the world's largest exporter of pineapples and third-largest exporter of bananas. APM Terminals Moin will dedicate up to 70 per cent of the terminal to refrigerated storage of fresh produce. Reefer container shipments from Costa Rica are projected to double to 600,000 teu by 2030. The terminal operator also recently purchased six ship-to-shore cranes and 29 rubber tired gantry (RTG) cranes. On completion of Phase 1 of its development in 2018, the 1.3 million teu deepwater container terminal will be one of the most advanced in Latin America.



## US PORTS PREPARE FOR PANAMA CANAL COMPLETION

At least four ports in the south-western United States, including Port Canaveral and Corpus Christi, are reportedly making plans to deepen their waterways in preparation for the opening of the enlarged Panama Canal, rather than waiting for federal funding from Congress. Currently there are only four US ports on the East Coast with a depth of 50 ft (15.24 meters). The value of these proposed investments has been put at half a billion dollars.

## PORT CANAVERAL SEES CRUISE GROWTH

Port Canaveral's cruise sector is set to grow over the next three to four years, with the number of passengers handled forecast to rise from 4.2 million to 6 million. In 2016 the port's home fleet will expand to 10 vessels, including the mega ships 'Carnival Magic', 'Norwegian Epic' and Royal Caribbean's 'Oasis of the Seas'; and a US\$ 41.8 million project is under way to upgrade and improve Cruise Terminal 5.



Ruth Pateman / Shutterstock.com

## RECORD TEU AT PORT OF HOUSTON

The Port of Houston Authority has announced an expected record throughput of over 2 million teu in 2015. There has been a 14 per cent growth through the year. The Bayport Container Terminal also recorded the highest number of gate moves in a single day for either of the PHA container terminals, handling 4,300 movements.

## ST KITTS & NEVIS SET PASSENGER RECORD

For the first time, St Kitts & Nevis will handle more than 1 million cruise passengers in a single year. The projected total is 1.2 million passengers. Stay-over tourism is also being encouraged and now accounts for about 110,000 of the islands' annual visitors.



## THIRD BERTH AT COZUMEL PIER

Carnival Corporation has added a third pier to its Puerta Maya facility on the Mexican island of Cozumel. Costing some US\$ 20 million, the development will allow the company to handle three additional vessels at a time. To mark the opening, on 8 October 2015, three of the company's ships, 'Carnival Breeze', 'Carnival Freedom' and 'Carnival Triumph', called at the pier. Cozumel is the busiest cruise port in the Caribbean, handling around 3.3 million passengers a year. Work began on the new pier in May 2014, while the existing two-berth pier was reopened in October 2008 after a US\$ 50 million program of reconstruction in the wake of Hurricane Wilma in 2005.



Yevgen Balich / Shutterstock.com

## FIFTH QUANTUM SHIP FOR ROYAL CARIBBEAN

Royal Caribbean is investing in a fifth Quantum-class cruise ship. The new vessel is being built in Germany by Meyer Werft and is due for delivery by the end of 2020. Royal Caribbean had already ordered its fourth Quantum-class ship in May 2015 for delivery in 2019. The first, 'Quantum of the Seas', was launched in November 2014, followed by 'Anthem of the Seas' in April 2015. The third vessel, 'Ovation of the Seas', is due for delivery in 2016. All five were ordered from Meyer Werft.



## FOURTH OASIS FOR ROYAL CARIBBEAN

The battle for cruise supremacy continues with Royal Caribbean's announcement that construction of its fourth Oasis-class ship is under way. The keel has already been laid at the STX France shipyard in St Nazaire and the as-yet-unnamed vessel is due for delivery in the spring of 2017. Royal Caribbean has reported a healthy early trend in bookings for the 2016 season, with demand up on the previous year.

## CARBON LEVY IMMINENT?

A call for reductions in greenhouse emission levels may lead to a carbon levy for the shipping industry following climate talks in Paris in November. Industry analysts are concerned that a levy on fuel use, or one based on the market, could trigger a further rise in customer costs in an industry that is suffering from container overcapacity. While carbon dioxide emissions have fallen from 2.8 per cent to 2.2 per cent of the world total, there are forecasts of an increase over the next 35 years. Under the 1997 Kyoto Protocol, ship emissions are the responsibility of the International Maritime Organization rather than individual nations.

## ST KITTS TO EXPAND YACHTING SECTOR

Cruise tourism generated more than US\$ 80 million in revenue for St Kitts in the 2013/14 season and the Ministry of Tourism aims to develop its yachting sector with a view to topping that figure in the next 10 years. A strategy for infrastructure development and marketing is being put together following a St Kitts and Nevis Yachting Development Forum in November.

## FUTURE OF NICARAGUA CANAL IN DOUBT

There is more conflicting news about the Nicaragua Canal development. Further doubts were voiced after the Chinese telecom tycoon, Wang Jing, reportedly lost 85 per cent of his US\$ 10 billion fortune in the China stock market crash. Wang is the man behind the HKND Group, responsible for the US\$ 50 billion project to build a new transoceanic canal that would compete with the Panama Canal. In spite of delays and environmental concerns, officials say the project is on track, with construction due to begin in 2016 for completion in 2020. It was announced in November that the final go-ahead had been given for construction to start.



# STARBOARD BRIEFING

## SVITZER TO PROVIDE TOWAGE AT MOIN

The Danish towage and salvage company Svitzer has been appointed by APM Terminals to provide marine services for its new container terminal at the Port of Limón-Moin in Costa Rica. In a 30-year contract due to commence in 2017, Svitzer will deploy three azimuth stern drive tugs of 70 tonnes bollard pull, a pilot vessel and a maintenance barge. Pilots and tug masters will be trained by the company at its facility in The Bahamas.

## NEW MEGA YACHT MARINA IN ANGUILLA

The New York-based real estate company Time Equities is developing the Altamer Resort in Anguilla in partnership with marine companies Anaconda Ltd and Cross Island Development. The expansion will include a 164-unit resort and retail units as well as a marina for mega yachts up to 200 ft (60.96 meters) in length. It will be the island's first marina resort as well as an official point of entry.

## BUMPER CRUISE SEASON IN REGION

The region's cruise industry generated US\$ 3.16 billion in direct expenditures during the 2014/2015 season according to an analysis by Business Research & Economic Advisors (BREA). Some 23.6 million passengers were handled. The highest-ranked destination by expenditure was Sint Maarten, which accounted for nearly US\$ 423 million, followed by The Bahamas at US\$ 373 million and Cozumel at US\$ 365 million. According to BREA, the cruise industry provides more than 75,000 jobs and nearly US\$ 1 billion in employee wages.

## PANAMA CANAL UPDATE

The Panama Canal Authority (ACP) reports that the overall project is 94 per cent complete, with 93 per cent progress on the third set of locks. Work still under way includes electro-mechanical installations and the building of three dams at the northern end of the new Pacific locks. In the interests of safe navigation, 33 range towers have been installed to assist vessels in transit. Repairs are still under way to cracks found in the Cocolí lock gates.



## PANAMA CANAL SEES RECORD TONNAGE

Even as the Panama Canal struggles with congestion and delays to its expansion program – along with the possibility of future competition from Nicaragua – the Panama Canal Authority (ACP) has announced record levels of tonnage transiting the canal in the 2015 fiscal year. The canal welcomed a total of 430.8 million PC/UMS net tons in fiscal 2015, the highest volume in its 101-year history and an increase of 4.3 per cent over the previous fiscal year. Containerships made up the largest segment of vessels transiting the canal.

## GET ON BOARD

START PROMOTING  
YOUR BRAND ACROSS  
THE CARIBBEAN



For further information on  
advertising in Caribbean Maritime  
contact Land & Marine Publications

**Tel: +44 (0)1206 752902**  
Email: [advertising@landmarine.org](mailto:advertising@landmarine.org)

[www.landmarine.org](http://www.landmarine.org)

## CSA DIARY

# 45TH CARIBBEAN SHIPPING ASSOCIATION ANNUAL GENERAL MEETING, CONFERENCE AND EXHIBITION

18 to 21 October 2015 - Cartagena de Indias

CSA delegates gathered in Cartagena de Indias for the 45th AGM.



The opening of the 45th CSA AGM in Cartagena de Indias







A night of top-class entertainment







Outgoing president Grantley Stevenson greets HRH Prince Daniel of Sweden, Duke of Västergötland







New CSA President David Jean-Marie presented the coveted Port Award to the winning team, Sociedad Portuaria Regional de Cartagena (SPRC). With Mr Jean-Marie are Giovanni Benedetti, commercial director of Port of Cartagena Group; Susana Echavarría, CSA General Council member and PR director; and Anibal Ochoa, Vice-President and General Council member.



**RUSSBROKER CARIBBEAN MARKET REVIEW**

# MARKETS HEAD FOR SLOWDOWN AS GLOBAL ECONOMY WEAKENS

By Jan-H. Heikes





Vessels with high reefer intakes can still earn a premium of US\$ 1,000 to US\$ 2,000 but standard tonnage has come down to the same low levels as in Asia or the Med



## CONTAINER MARKET

In the 1,700 teu and 2,500 teu ship sizes the Caribbean charter market has followed the global downward trend. Vessels with high reefer intakes are still able to earn a premium of between US\$ 1,000 and US\$ 2,000 but standard tonnage has come down to the same low levels (US\$ 6,000-7,000) that ships can earn in Asia or the Mediterranean.

The 1,300 teu segment once again proved to be more resilient, resulting in about 20

per cent higher rates than the bigger vessels can achieve.

The categories of 1,100 teu and below are relatively stable, with earnings in the mid to high US\$ 7,000s.

Although only about 30 containerships between 500 teu to 900 teu are currently employed in Central and South American services, a special focus should be cast upon this segment. Strong demand, result-

ing in relatively high rates (US\$ 7,500) and long charter periods, have even enticed two 700 teu ships to retrofit cranes in the Far East and position to the Caribbean.

Today, about the same amount of teu capacity (all vessels up to 3,000 teu) is being deployed on Latin America-related services as at the beginning of 2015. Compared with the peak in May 2015, however, the active fleet has been reduced by about 4 per cent.



The fact that the first new eco ships such as SDARI 1100s and SDARI 2400s have moved over from Asia during the fourth quarter underscore the need for high-specification tonnage in the Caribbean market.

## SALE & PURCHASE OF CONTAINER TONNAGE IN CARIBBEAN

This year's trend of carriers taking advantage of low asset prices continued throughout the last months of the year as two high reefer 2,500 teu ships have been purchased by a specialized reeferized fruit carrier. A CV1100 was sold and is to stay in the Caribbean market, a 500 teu geared ship has been sold to a European operator and left the Caribbean market. It was replaced by a gearless vessel.

The Caribbean shipping market saw Crowley taking over Seafreight, thereby supplementing its liner service network. In Europe, Transatlantic of Sweden sold its Baltic/Continent service to SeaConsortium

## MERGER & ACQUISITION

The worldwide shipping community is looking at CMA CGM purchasing NOL, of which APL is a part, and COSCO and China Shipping merging. The Caribbean shipping market saw Crowley taking over Seafreight, thereby supplementing its liner service network. In Europe, Transatlantic of Sweden sold its Baltic/Continent service to SeaConsortium.

## MACROECONOMICS

Economically, the neighbor countries Venezuela and Colombia are currently moving in completely different directions. Colombia's GDP is expected to grow by about 3 per cent in 2015 and several container terminals are undergoing modernization and expansion projects. Venezuela, on the other hand, faces serious economic woes. Dependence on energy exports coupled with record low oil prices has caused its GDP in 2015 to shrink by about 6 per cent. Furthermore, the country has to deal with a massive inflation rate of 200 per cent, the world's highest. Brazil has now entered into a recession with the third quarter showing a hefty 4.5 per cent annualized GDP decline.

From a transport perspective, the situation for Central America and the Caribbean, however, looks much better. Although US\$ export values are projected to decline in 2015 by 3.7 per cent in Central America and 17.3 per cent in the Caribbean, export volumes are up by 3.5 and 3.9 per cent respectively. Imports paint a similar picture, with negative monetary values but 6.6 per cent and 2.0 per cent increases in volumes.

China's economic slowdown so far mainly affects the import of raw materials. Its strategic directive to emphasize domes-

CONTEX				
	Contex	12 months	12 months	24 months
		1,100	1,700	2,500
<b>Sep</b>	465	7,776	9,867	10,138
<b>Oct</b>	414	7,219	9,057	9,061
<b>Nov</b>	364	6,827	8,198	8,078
<b>Dec</b>	345	6,697	7,710	7,644

AVERAGE REEFER RATES				
	Aug	Sep	Oct	Nov
class 424000 cbf	34.5	36.5	37	46
class 265000 cbf	81	71	55	66.5



**LINKING EUROPE AND THE CARIBBEAN**  
weekly · fast · direct · dedicated

 **StreamLines**

StreamLines N.V. | [info@StreamLinesNV.com](mailto:info@StreamLinesNV.com) | [www.StreamLinesNV.com](http://www.StreamLinesNV.com)



tic consumption and rising disposable incomes, however, will have a positive effect on imports of food and agricultural products. A similar trend can also be registered globally as demand for fresh food products is expected to remain strong for the next couple of years. This development should positively affect the economies of some Caribbean countries and increase the demand for reliable containerships with good reefer intake and speed values.

Negotiations over the relaxation of trade embargoes between Cuba and the US stalled during the second half of 2015.

## REEFER

After a long, slow and difficult summer, owners finally saw some light at the end of the tunnel when a number of vessels were fixed for bananas from ECCA during the first half of September. These shipments were destined mainly for Mersin. The excess cargoes turned out to be a significant seasonal bananas surplus in Central America and Colombia and fixtures continued through the first half of November.

The upswing did, of course, please reefer operators and supported the charter market as it resulted in an ongoing congestion in Mersin. Consequently, the market for large vessels shortened and operators were suddenly partly lacking tonnage for their contracts out of Spain/Morocco.

The number of ships fixed, coupled with the congestion and scheduling in for Chile to start loading the first stone fruit and grapes expected from week 48 onwards, cleared the charter market of open tonnage. Owners, however, only managed to achieve higher time charter rates as of the end of October. Generally, though, returns had been stable due to a steady decrease in bunker prices.

This situation certainly helped to increase the demand for the smaller segment, which had a tough time with a dip in rates from August till October due to the lack of fish requirements / missing quota for Nigeria. The potato shipments that slowly started in the middle of October combined with drydocking, other spot activity, followed by trawlers returning to the fishing grounds, leaves operators looking positively to the coming season.

As the supply of capacity tightens, the market will continue to strengthen, but the effort to drive rates higher has so far only been successful in achieving small steps.

## FIXTURES

Sep 15	<b>Chaser</b> 889 teu / 534@14 / 18on29 / 160rp	6-8 months	US\$	6,850	p/d
Oct 15	<b>Sandwig</b> 657 teu / 390@14 / 18on27 / 116rp	11-13 months	US\$	7,500	p/d
Nov 15	<b>Birk</b> 657 teu / 390@14 / 18on27 / 116rp	2-4 months	US\$	7,500	p/d

Sep 15	<b>Hoheriff</b> 964 teu / 604@14 / 18on35 / 326rp	6-7 months	US\$	8,050	p/d
Oct 15	<b>Heinrich Sibum</b> 966 teu / 604@14 / 18on35 / 252rp	4-6 months	US\$	7,900	p/d
Nov 15	<b>Vega Beta</b> 966 teu / 604@14 / 19on37 / 240rp	2-6 weeks	US\$	7,100	p/d

Sep 15	<b>Stadt Emden</b> 1,102 teu / 650@14 / 20on43 / 200rp	4-7 weeks	US\$	7,950	p/d
Oct 15	<b>Caribbean Voyager</b> 1,118 teu / 700@14 / 19on42 / 220rp	5-7 months	US\$	7,800	p/d
Nov 15	<b>Stadt Emden</b> 1,102 teu / 650@14 / 20on43 / 200rp	21-35 days	US\$	7,900	p/d

Sep 15	<b>Mercs Jaffna</b> 1,368 teu / 870@14 / 20on45 / 258rp	5-7 months	US\$	9,000	p/d
Oct 15	<b>Stadt Gotha</b> 1,296 teu / 957@14 / 20on47 / 390rp	11-13 months	US\$	10,300	p/d
Nov 15	<b>Magari</b> 1,338 teu / 925@14 / 20on52 / 449rp	3-7 months WCSA trade	US\$	9,700	p/d

Sep 15	<b>Hermann Hesse</b> 1,732 teu / 1299@14 / 20on60 / 378rp	8-10 months	US\$	10,100	p/d
Oct 15	<b>Gluecksburg</b> 1,688 teu / 1287@14 / 21on60 / 345rp	11-13 months	US\$	9,550	p/d
Dec 15	<b>Gdynia Trader</b> 1,728 teu / 1115@14 / 19on53 / 250rp	40-150 days	US\$	8,000	p/d

Sep 15	<b>As Patria</b> 2,602 teu / 1856@14 / 22on89 / 440rp	3-6 months	US\$	8,950	p/d
Oct 15	<b>Saint Nikolaos</b> 2,490 teu / 1868@14 / 20on88 / 566rp	3-7 months	US\$	8,000	p/d
Nov 15	<b>Pandora</b> 2,690 teu / 2100@14 / 22on88 / 500rp	3-6 months	US\$	7,850	p/d
Dec 15	<b>Blackpool Tower</b> 2,564 teu / 1807@14 / 21on74 / 342rp	6-11 months	US\$	6,250	p/d

'Data are becoming the new raw material of business' - *Craig Mundie, Senior Advisor to the CEO at Microsoft*

## THE IMPORTANCE OF

# big data

cost  
records

petabytes

database

logs

internet

time management

search

information

cloud

server

stor

disks

remote

technology

computing

terabytes

capa

software



## WHAT IS BIG DATA?

**T**he big data phenomenon has emerged rapidly over the past few years. Every day 2.5 quintillion (that's 18 zeros) bytes of data are produced around the world. This data boom is due to several factors:

- Data can be produced without a data entry clerk at a computer.
- Ever-increasing storage capacity at lower costs.
- Increased online activity – online purchases, browsing habits and mobile apps – all of which collect a ton of data on users.
- Data-gathering sensors in almost every device: weather machines, motor vehicles, GPS devices, even in refrigerators.
- IoT (internet of things), combined with the approx. 5 billion mobile devices worldwide facilitate ease of data collection.

In essence, big data is a trend in business and technology that uses data derived from large and diverse data sources and a set of enabling technologies to provide sophisticated analytics, enabling insights that substantially improve decision-making and strategic business moves.

### HOW IS IT IMPACTING BUSINESSES?

Big data is creating excitement across all industries, including government, health care, media, energy, education and IT. Data is becoming central to business operations and can be crucial in revealing patterns and associations, spotting business trends, preventing diseases, combating crime, etc. Many institutions have invested heavily in data analytics. Numerous data-mining companies have emerged to supply the demand for data solutions, some grossing billions in profit. As the world becomes more data-driven, how can we harness this

vast pool of data? New ideas and techniques for navigating and harnessing the power of this data have revolutionized our approach. Through data visualization and data analysis we are able to ask the right questions. Now, businesses understand how it can be used to predict, control and create many different kinds of futures.

There are several success stories for companies who have invested in big data analytics.

- UPS has invested heavily in software that shortens drivers' routes and saves millions on fuel. The company no longer needs to rely on the knowledge of drivers to find the most efficient route.
- In 2011 Google bought ITA Software for US\$ 700 million; ITA gathers flight price data from most major carriers and sells it to travel agents and websites, enabling Google to provide predictions for prices for flights, hotels, shopping and more.
- Walmart, which is one of the world's biggest retailers, uses this big data to monitor sales and inventory volume, in-stock percentage, gross margin and inventory turnover, among other things. As a result, it could achieve low levels of inventory risk and associated costs.
- In November 2015 Imperial College in London opened the KPMG Data Observatory, the largest of its kind in Europe, which features an enveloping circular wall of 64 monitors powered by 32 computers facilitating 313 degrees of surround vision. This provides an opportunity for academics and industry to visualize data in a way that uncovers new insights and promotes the communication of complex data sets and analysis in an immersive and multi-dimensional environment.

Everyone has a little piece of the big data action and is reaping the benefits of cost reduction, faster and better decision-making and foresight into new products and services.

## **BIG DATA AND THE SHIPPING INDUSTRY. HOW TO TAKE ADVANTAGE OF THIS TECHNOLOGY**

The shipping industry is striving to optimize performance and improve efficiency. All areas of shipping can benefit from data analytics. Examples are integrating logistics with weather routing data for speed optimization and fuel efficiency; and anticipating warehousing requirements far in advance.

Eventually, the shipping industry will fully embrace the information age, with a fully data-driven operation that facilitates intelligent decision support.

### **POINTS OF CONCERN**

**Information – Knowledge –**

**Power.** With great power comes great responsibility. Big data is no doubt a powerful tool which can bring about great harm. Some areas of concern are:

- **Privacy:** this was clearly highlighted during the Edward Snowden saga. People like to be in control when it comes to what is exposed about their private lives. Data is being collected about you even when you are unaware of it. It therefore begs the question, who now has access to that data? We have been conditioned to allow applications access to our personal data, based on privacy guarantees; however, even the top secret government servers are being hacked. So what

happens when these hackers now have your personal information?

- **Ethics:** How is this data being used? Imagine that a company has salary and banking information about people in a region, i.e. their spending power, and imagine if that same company also has knowledge of their social habits and needs. This company would be able to price a product not based on its value but based on the community's ability to pay.
- **Discrimination:** Big data can be used to discriminate against individuals, who may be unaware of this and therefore unable to defend themselves on the content

and context of data that is being used to discriminate against them. For example, being denied entry to a foreign country without knowing why.

It is therefore very important to encourage policies that monitor and govern data harvesters and promote ethical and responsible use of the data gathered.

### **FUTURE OF BIG DATA**

Moving forward, big data will ultimately influence every aspect of human existence. The key is that with more information comes the potential for better decision-making. So we can look forward to an exciting future where we better understand ourselves and our environment.

WHATEVER YOUR PLATFORM – NEVER MISS ANOTHER ISSUE  
subscribe online @ [www.caribbean-maritime.com](http://www.caribbean-maritime.com)





# PORT OF KINGSTON

The Western Hemisphere's  
Beacon of Maritime Excellence



## YOUR TRANSSHIPMENT HUB TO THE WORLD

The Port of Kingston has become a key player on the international shipping scene. With its excellent facilities and strategic location, Kingston is widely recognised as the Caribbean's number one hub for container transshipment.

Focus of operations is Kingston Container Terminal (KCT), owned by The Port Authority of Jamaica and operated by Kingston Container Services Ltd, a major subsidiary. KCT has three terminals with a combined capacity of 2.8 million teu. Maximum efficiency has been achieved through a combination of leading-edge technology, stable industrial relations and a highly trained, well motivated workforce.

The Port of Kingston is perfectly placed for ships trading on north-south and east-west routes across the Caribbean and for vessels using the Panama Canal.

The Port Authority  
of Jamaica



15-17 Duke Street, Kingston, Jamaica W1  
Tel: +876 922 0290/9 • Fax: +876 924 9437  
Email: paj@portjam.com • www.portjam.com

KCT Services Limited  
Tel: +876 937 7916



# **BUILDING PROGRESS TOGETHER**



After 20 years and \$800 millions invested, **MANZANILLO INTERNATIONAL TERMINAL** is **THE LEADING CARGO HUB IN THE REGION** and **THE MOST IMPORTANT COMMERCE GATEWAY FOR PANAMA**. We continue to leverage **INNOVATIVE TECHNOLOGIES AND PROCESSES FOR THE BENEFIT OF CUSTOMERS** and the development of our collaborators, the Colon community and the logistics industry in Panama.



*Serving Panama and the world.*

[www.mitpan.com](http://www.mitpan.com)

Tel: (507) 430-9800

[info@mitpan.com](mailto:info@mitpan.com)

 ENCUÉTRANOS:  
Manzanillo International Terminal