



# Caribbean MARITIME



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## DRONES

RISE OF THE MACHINES

## SPECIAL REPORT

# DREDGING

## ST MAARTEN

THE ROAD TO RECOVERY

PROFILE: AGUSTIN DIAZ JR. | PORT TERMINAL KPI'S | CSA NEWS | FLORIDA PORTS



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14



20



33

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## CM 34 COVER IMAGE

Courtesy of DEME Group

Dredging International: the cutter suction dredger 'd'Artagnan', Panama City, 2016

## CONTENTS

### 2 FROM THE CSA PRESIDENT

Resilience and innovation  
- key drivers for growth

### 4 HARBOR VIEW

### 6 CSA NEWS

- 6 CSA pays tribute to Noel Hylton
- 8 CSA's drive to help storm-hit communities

### 10 PROFILE: AGUSTIN DIAZ JR.

Fleet manager with a passion for networking

### 14 FLORIDA PORTS

- 14 Port Everglades
- 19 Port Canaveral

### 20 SPECIAL REPORT: DREDGING

- 20 Dredging in the Caribbean - Overview
- 23 Dredging International NV
- 25 Ocean Dredging DSM
- 27 Dutch Dredging
- 28 Van Oord

### 30 PORT ST. MAARTEN

The road to recovery

### 33 DRONES

Rise of the machines

### 36 PORT TERMINAL KPI'S

It pays to know how well you're performing

### 38 PORT BRIEFING

### 40 CRUISE NEWS

### 41 STARBOARD BRIEFING

### 42 RUSSBROKER CARIBBEAN MARKET REVIEW

Global upswing pulls Caribbean charter market along

### 47 ADVANTUM

Does your cybersecurity strategy include insurance coverage?



# Resilience and innovation – key drivers for growth

**A**s we continue to chart a course for growth in 2018, we are ever mindful of the many challenges on the horizon. For many of us in the region, several of the challenges of the previous year continue to linger into the present and impose rigid constraints on the pursuit of prosperity.

Of the many issues that adversely affect the profitability of the shipping industry, I would like to draw your attention to a recurring threat that has been intensifying in recent years – hurricanes. This force of nature, with which we are all too familiar in this part of the world, has been wreaking considerable havoc with great frequency. The 2017 Atlantic hurricane season brought with it widespread destruction and tragic loss of life. It featured 17 named storms that yielded 10 consecutive hurricanes. Estimates put it as the costliest hurricane season on record with approximately US\$ 280 billion in total economic losses.

While the hurricanes violently and rapidly swept through the region, the damage that still remains is indicative of the slow road to recovery that many regional economies are currently facing. As we have done in previous years, the CSA has come to the aid of the affected islands by donating US\$ 100,000 to their disaster relief efforts. It is our hope that this contribution will make a difference in the lives of many families.

## RESILIENCE PLANNING

It is also our hope that, going forward, the region will give greater consideration to strengthening our collective resilience in the face of extreme weather events. The onus is on us to ensure the development of resilient

communities that are adequately positioned to both respond and adapt to the changing climate and the ensuing external shocks. Disaster resilience planning should be an ongoing process that focuses on surviving and thriving in times of emergency.

I would like to take this opportunity to commend the current capacity-building work taking place on the ground, which seeks to establish a platform to build resilience. The Caribbean Disaster Emergency Management Agency (CDEMA) and its partners are reviewing early warning systems from the 2017 hurricane season in order to strengthen resilience against future disasters. The CSA fully endorsed the recent Caribbean Port Management Workshop, spearheaded by the Port Management Association of the Caribbean (PMAC). This



David Jean-Marie  
President  
Caribbean Shipping Association







forum tackled the development of a quick-response Regional Disaster Assistance and Relief Network and outlined the crucial link with the Regional Logistics Center for Humanitarian Assistance (CLRAH) in Panama.

While these initiatives represent a step in the right direction, there is more important work to be done as we brace for the 1 June start of the 2018 Atlantic hurricane season and beyond. Resilience is clearly not a matter of choice; it is an imperative that requires a concerted effort to prevent natural disasters from eroding the socio-economic gains we have made as a region.

## LEVERAGING THE POWER OF INNOVATION

I would now like to turn your attention to the topic of innovation, which has a key role to play in support of resilience building. Resilience requires innovation and innovative thinking to surmount our challenges and increase adaptive capacity. More than simply reacting to events to survive, the concept also includes evolving and taking advantage of emerging opportunities.

To borrow a quote from Fiorella Iannuzzelli, advisory director in charge of enterprise resilience and risk consulting at PricewaterhouseCoopers (PwC): "Innovation is an integral part of...being able to emerge from the 'other side' of an event in a stronger position." So whether it is sourcing funding, devising technical solutions, establishing partnerships or implementing processes, innovative thinking is a critical component in the cultivation of resilience.

## BLOCKCHAIN TECHNOLOGY

The proliferation of technology continues to accelerate the pace of innovation, and there is no place in the modern business environment for those who fail to keep up with latest developments. Blockchain – the game-changing innovation that has the shipping industry buzzing with excitement – has been mentioned in previous issues

of this publication, but I strongly believe it is a topic we should continue to follow closely.

Blockchain has evolved from simply being the underlying technology associated with the Bitcoin cryptocurrency. It is now paving the way for new business models and forcing industries like ours to rethink the way we do business.

The recent partnership between Danish shipping giant Maersk and the American tech titan IBM to form a new company to commercialize blockchain technology is a welcome development. This new business entity intends to assist shippers, ports, customs offices, banks and other stakeholders in global supply chains to track freight more efficiently and replace costly, time-consuming paperwork with tamper-resistant digital records.

The opportunities and advantages provided by this technology are evident; and its rising tide is poised to lift the shipping industry into a new era. When we consider it with other innovations emerging around port automation, energy use, vessel management and other key areas, it is clear that technology holds the key to a more efficient, productive and sustainable future for shipping.

## CSEC CONFERENCE

I invite you to learn more about disaster resilience and the technologies shaping the shipping industry at the CSA's 17th Caribbean Shipping Executives' Conference (CSEC) at the Hilton Fort Lauderdale Marina in Florida from 14 to 16 May.

The event will feature an informative and engaging half-day workshop on disaster awareness, with participants from regional ports, shipping lines, the US Coast Guard and the Royal Netherlands Navy. The spotlight will also be cast on the Maersk/IBM blockchain initiative – a topic I am sure you will not want to miss. Also high on the tech-

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**While the hurricanes violently and rapidly swept through the region, the damage that still remains is indicative of the slow road to recovery that many regional economies are currently facing**

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nology agenda is the rise of e-commerce and the digitalization wave in the shipping industry.

Other areas for discussion include the international trade outlook for the Caribbean and Latin America; raising standards of the shipping agencies; the cruise shipping industry; Cuba and the Trump administration; and air freight challenges and opportunities. I look forward to productive sessions and hope to see you in the vibrant city of Fort Lauderdale.

## REMEMBERING NOEL HYLTON

In closing, I would like to pay profound tribute to the Hon. Noel Hylton, OJ, who passed away in February. A seminal figure in the regional shipping industry, Mr Hylton played a leading role in the formation of the CSA and served as its first secretary and first executive vice president.

He was a man of extraordinary vision with an unwavering commitment to the industry that he served with great passion. His contribution to his native Jamaica and the wider region can never be truly measured. With his passing, we have lost a formidable pioneer.

On behalf of the CSA, I wish to express my heartfelt condolences to his family. He was a leading force in the industry and the CSA is proud to stand as part of his enduring legacy.



## HARBOR VIEW

### NASSAU CONTAINER PORT

A bird's-eye view of Nassau Container Port in The Bahamas. Both the 57-acre container port and the 15-acre inland Gladstone Freight Terminal are owned and operated by the Bahamian company Arawak Port Development. These two facilities serve as exclusive trading gateways to New Providence and Paradise Island. Each year, APD's operating companies handle an estimated 135,000 TEU and up to 800,000 tons of dry bulk aggregate, 25,000 tons of breakbulk cargo and 15,000 vehicles.









## CSA PAYS TRIBUTE TO NOEL HYLTON

**M**embers of the Caribbean Shipping Association have been paying tribute to the organization's first secretary and first executive vice president, the Hon. Noel Hylton, OJ, who died on 24 February after a period of illness.

Mr Hylton was instrumental in the formation of the CSA. In 1970 he was among representatives from five national shipping associations in the region who met in Barbados and decided to form a Caribbean-wide association.

As the Shipping Association of Jamaica's then general manager, Mr Hylton served as secretary to the steering committee and undertook much of the work of establishing and registering the CSA and its secretariat in Kingston, Jamaica. The aim of the steering committee was to bring together shipping interests across the region to integrate interests and exchange advice, experiences and information.

Later, as the CSA's first executive vice president, Mr Hylton oversaw the development of documentation and the establishment of procedures for the new organization. In addition, he oversaw the task of organizing the content and logistics of the association's first general meetings.

"Mr Hylton was instrumental in the formation of the Caribbean Shipping Association," said current CSA president David Jean-Marie. "He visited and lobbied the shipping leaders of the region and subsequently participated in the organization and legitimization of the association. What we know today as one of the most influential shipping organizations in the region,

which impacts the direction of thought of leaders among its represented countries and beyond, is in large part due to the industry and vision of Mr Hylton, especially in those important formative years. I am grateful that the maritime industry has had someone of his stature to guide it through its developmental years. I wish to express deepest condolences to his family on behalf of the CSA General Council and, indeed, on behalf of Barbados Port Inc. He was a great man and we continue to carry on his legacy with pride, conviction and purpose."

### DEDICATION

Mr Jean-Marie added that, as a consequence of his hard work and dedication, Mr Hylton was also very fondly remembered by members of the CSA.

Alvin Henry, who succeeded Noel Hylton as secretary and then executive vice president of the CSA, described him as one of the founding fathers of the Caribbean Shipping Association. "Noel was pivotal to the formation and development of the CSA," said Mr Henry. "He was instrumental in getting other shipping managers from the other countries in the Caribbean involved in the CSA." And he added: "The CSA today owes a debt of gratitude to Noel for his sterling contribution in its formation and development in the early years."

CSA past president Luis Ayala-Parsi was equally moved by the news. "The port of Jamaica lost its main believer and supporter," he shared. "I lost a very good friend with whom I shared many fond moments. My condolences to the family and all of you [Jamaicans]."

Past president Frank R. Wellnitz said: "The Caribbean shipping community has lost a visionary and Jamaica has lost a most dedicated all-weather, all-party servant." He went on: "I met the Honourable Noel Hylton back in 1975 during the early stages of the Caribbean Shipping Association and he proved himself to be a strong proponent and contributor to the industry. Tony, as he liked to be called by his friends, understood the hub and transshipment concept and appreciated the role of feeder services in the region. One of his favorite mantras, as he sought to promote Jamaica as a major shipping point, was: 'Where there are no feeders, there cannot be any mainliners'. A part of his commitment to the industry was reflected in his deep regard for the welfare of the men and women working in the port facilities. We will miss him. May he rest in peace."

### KNOWLEDGE

CSA past president Ainsley Morris remembers Noel Hylton as "a very balanced manager who sought to make sure that every member of the association was dealt with fairly. His encyclopaedic knowledge of shipping, gained through his years of service to the industry, is going to be difficult to replicate."

Another CSA past president, David Harding, recalled: "I met Noel (Tony) Hylton

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'The CSA today owes a debt of gratitude to Noel for his sterling contribution in its formation and development in the early years'



in the mid 1970s, a period of great movement for the regional shipping industry driven by the fledgling Caribbean Shipping Association. Even then, Tony's energy and dedication were the hallmarks of what was to be a long and rewarding career in the maritime business. He bestrode the industry both in Jamaica and the Caribbean as the colossus he was destined to become. Our friendship over the many years never waned. Rest in peace, Tony, my friend."

## SOUNDING-BOARD

Corah Ann Robertson-Sylvester, who holds the distinction of being the only female among the past presidents of the CSA, said: "On a personal level, Mr Hylton was one of my super-heroes, always willing to give sound, calm advice when approached on industry matters and a great sounding-board for matters relating to the development of the CSA and how we got there. He was a great organiser and was instrumental in rallying the Caribbean shipping people together in the early days. He and the CSA's first president, Peter Evelyn, were close colleagues and friends and came together in a meeting in The Bahamas [which later gave birth to the CSA] to share Jamaica's experience in managing labor on the advent of containerization. I remember fondly his last visit with the CSA in 2011 and how excited he was to be there to meet old friends. He marveled at how the organisation had grown and the strength and power of the voices from the floor. Noel Hylton will be missed."

Grantley Stephenson, immediate past president of the CSA, remembers Mr Hylton as "a visionary who served the Caribbean shipping fraternity unhesitatingly and selflessly. He was a proactive stalwart who grasped the budding potential to help mold the bedrock of the shipping industry that we have come to know today." Mr Stephenson added: "It is we who are proud to have shared in the history of this great man. Our hearts are filled with great gratitude as we acknowledge the significant contribution made by Mr Hylton in service to the Caribbean and in particular the shipping industry. Our deepest condolences to his family. His legacy lives on."

Tributes to the life and work of Mr Hylton have been coming in from all over the world.

'A visionary who served the Caribbean shipping fraternity unhesitatingly and selflessly. He was a proactive stalwart who grasped the budding potential to help mold the bedrock of the shipping industry that we have come to know today'



Noel Hylton spoke to Caribbean Maritime in 2013 after his retirement from the Port Authority of Jamaica, where he had served as chairman for more than 40 years. The article featured in Issue 21 of Caribbean Maritime, which was published in January 2014, and can be accessed in the 'Archives' section on [www.caribbean-maritime.com](http://www.caribbean-maritime.com)



# CSA NEWS

## CSA'S DRIVE TO HELP STORM-HIT COMMUNITIES

**T**he 2017 hurricane season was a very active one with six major hurricanes measuring Category 3 and above in a year when there were 17 named storms. In light of this devastation, members of the Caribbean Shipping Association embarked on pledges to help their neighbors to rebuild.

On 9 October, at the 47th Annual General Meeting in Barbados, the President of the CSA, David Jean-Marie, initiated a drive for members to contribute a pledge of US\$ 10,000. At registration, each delegate received an envelope and was asked to participate in the CSA's commitment to assist countries devastated by the hurricanes.

### ANTIGUA & BARBUDA

The Ministry of Education was presented with a cheque for US\$ 10,000 to rebuild the Sir McChesney George Secondary School, the only high school on the island of Barbuda. The school reopened with facilities so damaged that classes were kept to a minimum. The Director of Education, Clare Browne, thanked the CSA for this gesture and for recognizing that education was a strength in people's development – a sentiment echoed by school principal John Mussington.

### BRITISH VIRGIN ISLANDS

The British Virgin Islands Port Authority received generators, flashlights and batteries as a part of the CSA pledges. The management team said the donation had been well received by port authority staff.

### DOMINICA

The island of Dominica was badly hit by the hurricanes, with lives lost and families left to mourn the loss not only of loved ones but also of things acquired through hard work. The CSA donated items worth a total of US\$ 10,000. Its donation to the islanders was not

limited to material things but included an invitation to share their experience at an upcoming workshop in Fort Lauderdale on 16 May.

### SINT MAARTEN

Sint Maarten received US\$ 10,000 to cover various repair projects in the aftermath of the hurricanes. The Sint Maarten Development Fund embarked on assisting the children of Sint Maarten.

### ST CROIX

The CSA donated US\$ 7,500 to the St Croix Community Development Foundation to buy food and other essential items for the islanders.

### US VIRGIN ISLANDS

The CSA donated US\$ 7,500 to the Virgin Islands Children's Museum in Charlotte Amalie, where children were being housed in tented accommodation because the museum's roof had been badly damaged by the hurricane. Following extensive work, the museum was due to reopen on 15 March this year to continue its mission to provide a congenial learning environment for children.

### SOCIAL RESPONSIBILITY

The CSA collected US\$ 75,000 of the pledged US\$ 95,000 and has spent US\$75,895 so far. This project is ongoing as there are still several ways in which the CSA hopes to assist. The 2018 hurricane season in the Caribbean region is due to commence on 1 June and is expected to end on 30 November. Until then the CSA, a non-profit organization, has deemed it prudent to be more active on behalf of its members in generously assisting those affected. It also hopes to have more members on board.



The CSA would like to thank the following companies and individuals whose pledges have been used to rebuild and repair broken facilities and spirits:

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# Fleet manager with a passion for networking

**Agustin Diaz Jr.**  
Business Development  
Manager, Svitzer Caribbean  
Part of Maersk Group



**Q. Where were you born, where did you go to school and what did your parents do for a living?**

**A.** I was born in Willemstad, Curaçao, where I attended a Catholic high school. My mother worked in the airline industry. She started her career at Pan Am and ended it in 2005 after working for over 15 years with KLM as crewing officer. My father started his career as a school teacher, but he soon entered local politics where he spent 16 years altogether as a member of parliament and eight years as minister of the former Netherlands Antilles. He retired in 2010 after a 15-year job as port director at the Curaçao Ports Authority, which he founded in 1981 as the minister of economic development responsible for the port.

**Q. In terms of higher education, where did you attend university or college and what did you major in?**

**A.** Since Curaçao is part of the Dutch kingdom, it is quite common for young students to leave the island after finishing high school to attend college or university in the Netherlands. At the age of 18

Agustin Diaz Jr. is our personality profile for this issue of Caribbean Maritime. Mr Diaz has a wealth of experience in the towage sector and has worked for major tug operators across the region, not only in his native Curaçao but also in Panama, the Dominican Republic and Colombia. Being fluent in four languages has no doubt helped Mr Diaz move effortlessly around the Caribbean. But it's his acknowledged skill in the somewhat esoteric art of managing a fleet of tugboats that really sets him apart.



I departed to Rotterdam to attend college at Hogeschool Rotterdam & Omstreken in an attempt to become a maritime officer. After the initial year, I realized that navigation was not really what I wanted to do. I changed course slightly and embarked on a journey to study international logistics engineering at the same college, which – combined with an additional NIMA business marketing study – laid the foundation for the career I have in the shipping world today.

**Q. When growing up, did you have a clear idea of what career you might choose?**

**A.** Yes. Ever since I was a small child, I felt the lure of the sea and its ships sailing in and out of our harbor, bringing cargo and connecting continents. Growing up in Curaçao made it impossible to ignore all the harbor traffic going on in the middle of downtown Willemstad. It made me wonder: how do the logistics behind it all work? At a respectable second place on my mind was the beverage industry, especially the marketing behind it. I see doing business development in the shipping industry as a fusion of both passions: shipping and commercial. Knowing the right people, making new contacts to discuss and develop business; isn't this one of the main reasons we all love the CSA?

**Q. After finishing your education, what was your first job?**

## 'Ever since I was a small child, I felt the lure of the sea and its ships sailing in and out of our harbor, bringing cargo and connecting continents'

**A.** My first 'real' job was as a marketing assistant at a hedge fund administration office in Amsterdam, where I worked for a little more than a year. Before that I worked odd jobs via an employment agency at a market research company during my college years.

**Q. How did you become involved with tugs?**

**A.** It was in 1994 after my first year studying for maritime officer in Rotterdam. I was given the opportunity to spend a summer vacation working at the local tug company in Curaçao. Coincidentally, that was around the same time I realized I was not interested in becoming a sailor, but that I would rather contribute to the maritime industry from the shore side, maybe even in another segment. In 1997 I received an invitation from Damen Shipyards to attend the ceremonial launching of the tugboat 'Lima II' in the Netherlands, which was purchased by KTK in Curaçao. At the time, this revived my passion for tugs. A few years later, I moved back to the island, where I started working as an assistant manager at the government-owned KTK Tugs. Back then, in 2003, tug services in Curaçao were shared with SMIT

and KTK Tugs had a fleet of two tugs. During the seven years' experience considered as my first involvement with tugs, KTK became the sole tug operator in all ports of Curaçao. The fleet grew from two to eight tugs and the company expanded its horizons with multiple long-term bareboat contracts in Venezuela and a harbor towage contract that is still ongoing with Colon Container Terminal in Panama. This growth was due to great company teamwork and strong labor unions, local government and public support. The displayed growth would not have been possible without the operational back-up from other regional tug companies such as Remolcadores Dominicanos (now Svitzer) and Intertug, with whom a cooperation agreement was signed during a CSA conference in Curaçao in May 2006.

**Q. When did you join Svitzer and what's your present role with the company in Santo Domingo?**

**A.** I joined Svitzer in October 2015. My first day at work for Svitzer was at the CSA conference held in Cartagena. The Santo Domingo office is responsible for the Caribbean market. My role is to develop new busi-







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ness in the Caribbean while assisting other regions when needed. There is constant communication and information sharing between regions.

**Q. What has been your best decision since you joined Svitzer Caribbean?**

**A.** I believe there are no good or bad decisions. I'm most proud of the decision-making process that we follow in Svitzer. It allows the key members to take a comprehensive approach to find consensus in the most viable option to choose. The process may be tedious sometimes, but it always gives good results when followed well.

**Q. Is it a big challenge to oversee the Svitzer Caribbean fleet of 18 vessels across 14 ports?**

**A.** Once you know the industry and the organization from the inside out, every challenge is taken as an issue to be solved. It might look difficult initially, but in the long run there is always a solution. We aim to further expand our fleet in the Caribbean.

**Q. Does your fluency in Dutch, English, Spanish and Papiamentu come in useful?**

**A.** It's a tremendous advantage because it removes all barriers, allowing me to easily communicate with the large majority

of people and have access to information in most markets. In our company, it plays an important role to speak multiple languages.

**Q. What are your main aims at Svitzer Caribbean in the year ahead?**

**A.** To grow organically and consistently through the months by focusing on a global support, but always keeping in mind a local approach to business implementation.

**Q. What do you like most about the time you spend in the Dominican Republic? Or are you just too busy to enjoy?**

**A.** A tricky question. Besides the fact that I truly enjoy working with the Dominican team at the office, I do enjoy the Dominican culture, the Dominican people, the Dominican music, the Dominican food and the Dominican beer and rum. It all blends together creating good vibrations.

---

**'Once you know the industry and the organization from the inside out, every challenge is taken as an issue to be solved'**

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**Q. As someone who worked in the maritime sector of Curaçao, Panama, Cartagena and Santo Domingo, how different are their business environments?**

**A.** Each of these countries has its own unique way of doing business, growing from their traditions and culture. All of them have their own special touch. I have learned from my father to respect and nurture cultural differences, making them part of my experience and growth. Naming specific differences would feel to me as labeling. We are one people.

**Q. Which one person in the maritime sector do you most admire?**

**A.** My father, friend and mentor, Agustin Diaz, for his incredible network built during his career in the maritime sector, his achievements for the ports of Curaçao and international contributions through AAPA [American Association of Port Authorities], where he chaired the association for a year. Because of him, his guidance and expert introduction into the maritime sector, I now have a career that is not only fulfilling and successful but motivates me to improve and do better each day. He is a true inspiration.

**Q. When your time in Santo Domingo comes to an end, would you like to return to Curaçao or would you be happy to move elsewhere?**

**A.** I hope to remain part of the Svitzer team for many years to come as there are still missions to be accomplished. If that means that I would need to move across regions, that would not be new to me.

**Q. How do you relax outside of work?**

**A.** I have two kids aged four and seven. My wife and I spend a lot of quality time with the kids along with the rest of the family doing all kinds of activities. We love the soccer World Cup. Unfortunately, the Dutch team did not qualify. So, come July, I will be passionately cheering for my wife's country, Colombia. Panama will be strongly supported as well.







# Port Everglades invests in capital improvements to meet future growth

As a gateway for international trade and cruise vacations, Port Everglades is investing in capital improvements and expansion to meet future growth in container, cruise and petroleum traffic. More than US\$ 1.5 billion worth of infrastructure improvements are planned over the next 10 years.

**C**elebrating its 90th anniversary this year, Port Everglades has grown to become one of Florida's leading economic powerhouses.

As the world's number one cruise destination, the Caribbean region is the top trading partner of Port Everglades and has played a significant role in the port's success. Cruise passenger counts at Port Everglades have grown steadily over the years.

In terms of cargo throughput, Port Everglades has been handling in excess of 1 million TEU each year for the past four years, while petroleum volumes are growing as Florida's population continues to swell.

This growth is not coincidental. Port Everglades has a comprehensive master/vision plan that is updated on a regular basis so that its five-year master plan and 10 and 20-year planning horizons stay current

with industry trends and technological advances. This commitment to planning – both physical and financial – has made Port Everglades one of the top 10 container ports in the United States, one of the top three cruise ports in the world and the primary hub for fuel distribution in southern Florida.

## GANTRY CRANES

New cargo berths and super post panamax gantry cranes are in store for the Southport Container Complex. The US\$ 437.5 million expansion, the largest infrastructure project in the port's history, will allow for up to five new cargo berths by lengthening the existing Southport Turning Notch for cargo ships from 900 ft to 2,400 ft. The project is expected to be completed and operational by 2021.

Part of this effort includes the installation of crane rail infrastructure for new super post panamax container-handling gantry cranes. Port Everglades has ordered three such cranes at a cost of US\$ 13.8 million each to meet the demand from existing customers and new services anti-





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- Year-round berthing is available.





pated from the port's multi-million-dollar expansion program. The port also has an option to buy an additional three cranes within the next five years.

To further enhance ship traffic at Port Everglades, the US Army Corps of Engineers is moving forward with plans to deepen the port's navigation channels from 42 ft to 48-50 ft and to widen the narrower sections of the channel. This project is currently in the preconstruction engineering and design phase, having received Congressional authorization in December 2016. Deeper channels are needed to safely accommodate increasingly larger cargo

aesthetics to transform Cruise Terminal 2 into the first and only facility in the world specially equipped for its new Ocean Medalion interactive wearable technology service.

In addition to facility improvements in time for the 2018-2019 season, Port Everglades will welcome two brand-new ships in December 2018 – the 2,918-passenger 'Celebrity Edge', described as 'the ship designed to leave the future behind', and the 2,650-passenger 'Nieuw Statendam', the newest Pinnacle-class ship to be introduced by long-time Port Everglades customer Holland America Line.

Port Everglades is the main import

to improve links with South Florida's main highway and railroad systems.

One notable addition is a 43.4-acre near-dock Intermodal Container Transfer Facility (ICTF) owned and operated by the Florida East Coast Railway (FECR). This facility, opened three years ago, is located close to the majority of the port's container terminals, thus allowing international containers to be transferred quickly between ship and rail. The US\$ 72 million ICTF also handles domestic containers originating in or destined for the Eastern United States.

### OVERPASS

To enhance productivity for over-the-road container movement, the Florida Department of Transportation (FDOT) invested US\$ 42.5 million to build the Eller Drive Overpass connecting the east end of the I-595 interstate highway directly with the port's main entrance. The overpass allows vehicles entering Port Everglades to travel unimpeded over two rail tracks that lead into the FECR's intermodal facility. The I-595 highway gives direct access to I-95, I-75 and Florida's Turnpike.

This year, Port Everglades officials will begin meeting with port stakeholders, customers and people in the port community to gather their input as it updates its 20-year master/vision plan. As Port Everglades continues to advance major infrastructure projects, all aimed at improving capacity and productivity, it will continue to serve as an ideal point of entry for products shipped around the world.

## As a result of major investments in terminal and transportation facilities, Port Everglades expects to generate returns that benefit the cruise industry as well as the port's own bottom line

ships, especially those already coming from Europe and South America that must be lightly loaded due to the existing water depth. The project addresses environmental concerns and will involve the restoration and protection of coral. Construction will take place in multiple phases and is expected to be completed between 2021 and 2025, an estimated three to five years after commencement. The estimated cost to date is US\$ 389.3 million.

### IMPROVEMENTS

As a result of major investments in terminal and transportation facilities, Port Everglades expects to generate returns that benefit the cruise industry as well as the port's own bottom line.

Some of the improvements will be visible as soon as guests arrive at the port's entrance. New directional signs that combine functionality with art are being installed throughout the port in 2018. Port officials are also working with Royal Caribbean Cruises to completely expand and remodel Cruise Terminal 25 for the arrival in November 2018 of the new 'Celebrity Edge'.

In a public-private partnership, Carnival Corporation has made a multi-million-dollar investment in technology and

gateway for petroleum products for 12 countries in South Florida, including jet fuel for four international airports. In order to boost its petroleum receiving capacity, the port in conjunction with the petroleum industry is redeveloping Pier 1 by widening the adjacent slip by 150 ft and installing new offloading facilities. Starting in mid 2018 the petroleum industry will install a new manifold system – the first step of this multi-phase effort. The project is anticipated to be completed by 2026.

Landside, the port has completed several major public-private infrastructure projects







# Port Canaveral builds on hub status in cruise and cargo sectors

Canaveral Port Authority continues to make strategic investments in harbor and landside infrastructure improvements to augment the port's mission as Central Florida's premier maritime gateway. The port aims to be handling LNG-powered cruise and cargo ships by 2019.

**P**ort Canaveral is a world-class strategic gateway for Central Florida – now the 10th-largest consumer market in the United States with economic growth well above the national average. The port is Florida's third-largest by operating revenues, which are expected to exceed US\$ 100 million in Fiscal Year 2018.

Port Canaveral is an economic driver for the region, with an annual impact of some US\$ 2.2 billion. The Port Authority continues to invest in strategically planned improvements to meet the demands of commerce and tourism. Its goal is to sustain the port's value as both a viable commercial entity and a community resource, while keeping pace

with the global marketplace.

Port Canaveral is a popular homeport and port of call for some of the world's largest and most sophisticated cruise ships. Nearly 5 million passengers are expected at the port this fiscal year, once again making it the world's second-busiest cruise port.



## GOALS AND OBJECTIVES

- Sustain the port's value as both a viable commercial entity and a community resource, while keeping pace with an increasingly complex global marketplace.
- Expand port capabilities and infrastructure to meet the growth needs of cargo, cruise and commercial space.
- Support rapid growth of Central Florida's region and its demand for imports and exports with the port's Foreign Trade Zone 136.
- Improve crucial road networks to support increased growth in cruise and cargo business.
- Provide critical infrastructure to support the commercial space industry that depends on the port for recovery and relaunch operations.
- Support the recreational needs of the local community.





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**PORT  
CANAVERAL**



By 2019 it is expected to be the first US port capable of serving LNG-powered cruise and cargo vessels.

### DIRECT ACCESS

Port Canaveral's man-made deep-draft harbor offers direct access to the Atlantic Ocean, with a typical vessel transit time from first buoy to dock of only 45 minutes. The port's central east coast Florida location and easy access to major road and rail systems puts it within three hours of every major Florida market. A larger market of 81 million consumers throughout

structure improvements that continue to advance the port's business lines and recreational activities.

Several complex infrastructure projects will be initiated or completed at the port in the next two to five years. More than US\$ 446 million, currently identified in the five-year capital improvement projects, will be invested in the construction and expansion of port facilities and infrastructure to allow the port to handle a projected growth in cruise and cargo operations. In response to demand by cruise and cargo partners, there will

**More than US\$ 446 million, currently identified in the five-year capital improvement projects, will be invested in the construction and expansion of port facilities and infrastructure**

Florida and into the south-eastern US can be reached within eight hours from Port Canaveral. These key advantages attracted nearly 6 million tons of diverse cargo through the port in 2017.

Investment decisions for the future will be driven by the port's new Strategic Master Plan. This multi-year 'look ahead' includes near-term priorities of investments in expanded capabilities and infra-

be crucial improvements to the road network. Revamped bulkhead will support the growing commercial space industry, which depends on Port Canaveral for recovery and relaunch operations.



## CURRENT OR PLANNED INVESTMENTS

- Construction of North Cargo Berth 8, a new multipurpose cargo berth to accommodate a growing cargo portfolio that includes commercial spacecraft components. This landside and water-side investment will provide the infrastructure and flexibility to handle a range of cargoes in response to growing demand.
- Replace Cruise Terminal 3, currently used for single-day port calls, with an expanded modern facility to serve cruise ships with up to 6,500 passengers. The port will invest an estimated US\$ 150 million in the terminal, due for completion by the end of 2019, which will support nearly 4,000 permanent jobs.
- Develop operating scenario and related infrastructure to support earliest deliveries of LNG-powered cruise vessels at Port Canaveral.
- Manage the highest demand for bulkhead space in the history of the port with roadway expansions and improvements coupled with bulkhead renovations to meet changing requirements.

## ACCOMPLISHMENTS

- North Cargo Berths 5 and 6 renovated with 2,000 ft of quay deepened to 43 ft. The port is looking to purchase a mobile harbor crane with a reach of 18/19 containers.
- West Turning Basin deepened to the authorized depth of 43 ft plus 2 ft additional over-dredge to complement the existing authorized port channel depth of 44 ft. With the turning basin deepening project completed and the port's channel clear from overhead obstructions such as bridges or wires, Port Canaveral can boast one of the deepest-draft working cargo berths with no air draft limitation between Miami, Florida, and Norfolk, Virginia.
- Completed US\$ 54.5 million in capital investments in Fiscal Year 2017.
- Completed US\$ 33.9 million renovation of Cruise Terminal 10 to support an increased number of cruise ship calls and sailings.
- Ro-ro terminal operator AutoPort Canaveral, LLC expanded original equipment manufacturer (OEM) auto imports nearly four-fold to meet the high demand from central and south Florida markets.
- Fuel terminal operator Seaport Canaveral completed a US\$ 2 million truck lane expansion, nearly doubling the terminal's automated loading capacity to handle up to 500 trucks per day. Truck volume is expected to exceed 120,000 this year.

## CRUISE

The US, Europe, The Bahamas and the Caribbean, Mexico and Central and South America.

## TRADE PARTNERS

**IMPORTS:** Port Canaveral's top five foreign trade partners (by tonnage) are The Bahamas, Canada, Venezuela, the Netherlands and France.

**EXPORTS:** The port's top five foreign trade partners (by tonnage) are the Netherlands, the Virgin Islands, Costa Rica, The Bahamas and Panama.



# Dredging

- 20 Dredging in the Caribbean - Overview
- 23 Dredging International NV
- 25 Ocean Dredging DSM
- 27 Dutch Dredging
- 28 Van Oord

## DREDGING OVERVIEW

# BEAUTY AND THE BEAST

**Dredging is eco-sensitive - but regulators must not price it beyond reach**

There is intense pressure on the region's maritime industry to constantly improve and expand its facilities to meet the demands of international trade and tourism. But this expansion must be balanced with the region's desire to conserve and protect the outstanding natural beauty of its islands and coasts. A typical dredging project in the Caribbean will cost roughly 50 per cent more than elsewhere because of tough environmental regulations. In this article, consultants Jelle Prins and Luis Prieto call for a more joined-up approach by regulators across the region to ensure that port authorities can afford to keep up with essential dredging.

**T**he Caribbean is a unique region. There are few areas on earth where 13 sovereign island nations and 12 territories with ties to Europe and the United States depend so heavily on water-borne commerce. The region's pristine beauty and fragile environment also hold great value for the tourism industry, but it remains extremely challenging and costly for the maritime industry.

Navigating the intricate regulatory environment that covers the Caribbean's 7,000 islands also makes it necessary to understand the areas of low and high dredge frequency and the degrees of regulatory capacity. Some areas enforce disproportionately strict and complex regulations that often hinder the maritime industry's ability to meet the region's infrastructural needs.

## IMPACT

The impact of these regulations may not be immediately apparent. Infrastructure projects are critical to a region's economic well-being and sometimes must be carried out – a shoaled port can have severe and far-reaching economic consequences. In these instances, the consequence of the strict environmental regulation is cost escalation. And these costs are passed directly to the general population through

Picture courtesy of Dutch Dredging



repayment landing fees, head taxes and other costs.

Dredging – the underwater excavation of sediments – encompasses an array of needs. It is used to deepen channels and ports, build and nourish beaches, reclaim lands and for environmental clean-up. The role of the regulatory authority is to establish standards that limit these impacts while still permitting the dredging to proceed.

The Caribbean's dredging need is most heavily centered on navigation. There is a demand for dredging for public infrastructure including commercial ports, cruise terminals and private marinas. The unfortunate truth of dredging projects is that they have an inevitable impact on their immediate environments. There are ways to reduce this broad-ranging impact, while identifying the challenging circumstances that affect budget, complexity and delivery.

## FOCUS

Regulatory bodies with vast resources focus on water quality and scrutinize turbidity, the cloudiness in the water that occurs naturally on every coastline and can be seen during tidal shifts or areas with strong currents. The murkiness caused by the suspension of solids within the water column increases during human activity, and while turbidity has an undisputed potential environmental impact, builders are often unable to meet the regulatory standards imposed within the permits.

Turbidity regulations within the region are on average four times more exigent than prevailing international standards. The impact of this severity is significant and is reflected in well-above-average unit prices for dredging and other marine construction activities.

Turbidity is typically measured as a function of light penetration through a water sample. The most common unit of measurement is the nephelometric turbidity unit (NTU). The prevailing international standard for acceptable anthropogenic turbidity is 29 NTUs above background, meaning that a project may generate up to 28 additional NTUs of turbidity while remaining in compliance. For reference, a water sample with a turbidity of 20 NTUs appears almost perfectly clear. Conversely, the most common threshold we have experienced within the Caribbean regulations is between 3 and 5 NTUs above background, a meas-

## Numerous Caribbean regulatory authorities can create a regional standard and benefit from the combined experience of the region as a whole, while safeguarding their environmental resources...

urement that can fall within an instrument's margin of error.

Any specification requiring that a marine construction activity be governed by these limits exponentially increases the risks of cost overages and contractor default. The impact of this severity is significant and is reflected in the well-above-average unit prices for dredging and other marine construction activities in the region. With all other factors being equal, a dredging project in the Caribbean will cost upwards of 50 per cent more than a similar project elsewhere.

Several years ago, the Piedroba Consulting Group (PCG) partners managed the maintenance dredging of a navigation channel. The project was simple and involved the removal of some 100,000 cubic meters of beach sand that had filled the channel and that sand was redeposited on an adjacent beach. This is a common project and we would typically expect to see prices in the US\$ 5 to 10 per cubic meter range. In this case, however, the environmental permit required the dredging contractor to meet an unattainable water quality standard. Consequently, the lowest bidder on the project bid US\$ 23 per cubic meter. As we expected, they frequently exceeded the water quality threshold and experienced many shutdowns. Upon completion, the adjacent environment that the regulator sought to protect remained healthy and in good condition. The net effect of the regulation was that the project owner paid three or four times more than needed.

## BURDEN

As marine infrastructure project management consultants, the PCG has overseen or directly managed projects worth hundreds of millions of US dollars throughout the region. Without fail, nearly all of these projects experienced some degree of regulatory burden. To say marine construction can be performed without impact to adjacent waters is impossible. Yet regulation requiring such a standard will render a project unbuildable or shepherd it directly to the courtroom.

A responsible contractor will treat this risk by adding contingency costs to their proposals to abate their financial exposure to potential shutdowns or fines without going bust. While the impact of the regulations increases cost, the contractor will likely exceed the thresholds established and absorb the financial burden of the penalties; and consequently the end user will end up paying a senseless premium for the use of the facility. The end result is a project delivered at a higher price.

To better protect the environment when planning for dredging projects in the Caribbean, PCG encourages regulatory authorities to engage in early contractor discussions with stakeholders. Contract owners are generally most concerned with delivering the project on time and within budget; and this can go hand in hand with the protection of the environment through the implementation of widely accepted mitigation strategies.

Contractors would benefit from a more cohesive regulatory effort. Numerous Caribbean regulatory authorities can create a regional standard and benefit from the combined experience of the region as a whole, while safeguarding their environmental resources and while addressing the needs of the stakeholders and streamlining the unnecessarily complex and burdensome regulatory landscape.



By Jelle Prins and Luis Prieto  
Partners of the Miami-based  
Piedroba Consulting Group



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# Rocky challenge of canal entrance widening



**A**n interesting and challenging project for Dredging International NV\* was a US\$ 96 million contract to widen the Pacific entrance of the Panama Canal south of the Americas Bridge.

This capital dredging project was carried out between September 2015 and October 2016 on behalf of the Panama Canal Authority. It involved a symmetric widening of the existing eastern and western prism lines by 37.5 meters and required the removal of about 5 million cubic meters of spoil including large quantities of volcanic rock. The project also involved maintenance dredging.

For this task, the company deployed the trailer suction hopper dredger 'Lange Wapper', the seagoing cutter suction dredger 'd'Artagnan' and the barges 'Pagadder' and 'Sloeber'. All rock was dredged in direct mode by the 'd'Artagnan', which was equipped with cutter-heads designed and manufactured specifically for this project.

All material defined as over-

burden and highly weathered rock (residual soil) was dredged by the 'Lange Wapper', which was equipped with a drag-head designed to work and perform in mixed and tough soil conditions involving an abundance of rock outcrops.

## COLOMBIA COAL TERMINAL PROJECT

In an earlier project, Dredging International played a key role in the development of a new coal loading terminal at Puerto Drummond, on the Caribbean coast of Colombia.

In a contract on behalf of Drummond Colombia Ltd, the company dredged the turning basin and berthing area for the new terminal in a project that lasted from July 2013 to February 2014.

From an initial water depth of between 3.5 meters and 7.0 meters MSL, the area had to be dredged to a depth of 20.5 meters MSL. This required the removal of about 12 million cubic meters of mixed soils ranging from recent marine sediments to stiff clays.

To meet its six-month completion target, the company deployed four trailing suction hopper dredgers, the 'Orwell', 'Pallierter', 'Lange Wapper' and 'Pearl River'. For about four months of the project, three of the hoppers carried out simultaneous dredging.

The task of installing the new coal loading facilities – which included piling, jetty construction and delivery of the coal handling equipment – went ahead while the dredging was in progress.

Dredging International had to follow strict environmental



regulations in order to minimize any recirculation of sediments into the environment and adjacent port areas.

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\*Dredging International NV is a member of the Dredging, Environmental & Marine Engineering (DEME) Group, with its head office in Belgium.







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# Maintenance dredging: it doesn't pay to skimp

Everyone in the shipping business is aware of the benefits that can be derived from an economy of scale. But there are exceptions to this general rule, and one of these would seem to be the dredging business.

**A**ccording to Steve Côté, director of international business development for the Canadian dredging contractor Ocean Group, there are some popular myths in relation to the cost of maintenance dredging and how often it needs to be done.

## RECENT PROJECTS

Over the past five years, Ocean Group has carried out maintenance dredging in various ports in the Caribbean and wider region, including Dos Bocas and Veracruz in Mexico; San Pedro de Macoris, La Romana and Haina in the Dominican Republic; Kingston in Jamaica; and in Cuba.

In addition, the company has been involved in capital dredging for port construction and land reclamation in the British Virgin Islands in 2015; and capital dredging for a new wharf at Punta Catalina in the Dominican Republic in 2015 and 2016.

Projects for Ocean in 2018 include capital dredging at Coco Bay in The Bahamas; capital dredging for a new wharf in St Kitts; and maintenance dredging in Haina (Dominican Republic) and in Cuba.

"Many ports have the impression they have to wait until they have a lot of material quantities before launching a dredging project," says M. Côté. "But it's not true that big quantities always equal a better price. And the cost of waiting may outweigh the cost of dredging."

He says the consequences of putting off dredging work – or simply not having it done – can include the following:

- You may compromise your channel or port depth
- Your port's reputation will be affected by an insufficient draft or a port that is not reliable
- Ships could be damaged or grounded during transit of your port
- You could lose ship calls
- You could deter inward investment
- You may need emergency dredging at high cost
- Ships that are not fully loaded face a big loss of revenue.

So, to sum it up, maintenance dredging should be regarded by the port as an investment, says M. Côté.

## BIDDING: TRANSPARENCY IS THE BEST POLICY

Dredging companies are always eager for contracts, but Ocean Group likes to be sure that the

bidding process is carried out with maximum efficiency and transparency and that both parties to the contract are clear about what is involved in the project, how long it is likely to take, what equipment will be needed and what kind of natural hazards are likely to be encountered.

Accordingly, M. Côté says that when Ocean receives the request for proposal (RFP) it follows a laid-down procedure:

"We validate the availability of the equipment. We evaluate the value of the contract versus the time and cost that we need to invest. We make sure that the deadlines to submit the bid are realistic. We look at our chances

## OCEAN GROUP

Ocean Group was founded in 1972 by its current president, Gordon Bain. The group employs 850 people and has over 570 items of specialized equipment. The Ocean fleet is composed of 500 barges, 30 workboats, 34 tugs, seven pilot boats and six dredgers (both mechanical and suction types).

With its head office in Quebec, Canada, the group has 16 strategic business locations in Canada, Latin America and the Caribbean. Its priority is to offer a quality service to customers using state-of-the-art equipment.

of obtaining the contract. We make sure we meet the selection criteria. We define the risks. And we validate the scope of the work versus the date obtained in the request for quote."

According to the International Federation of Consulting Engineers, the most common dispute on a dredging contract relates to the contractor





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## OCEAN DREDGING CONT'D

encountering soil conditions that were not reasonably foreseeable. Ocean requires the following tender data in order to satisfy itself that the project is valid on both sides of the contract:

- Work scope (maintenance and capital)
- Quantities in cubic meters, depth, area to dredge in square meters, time to execute
- Disposal site (at sea or on land, distance)
- Nature of the ground (geological and geotechnical)
- Hydrographic factors (tides, currents, waves and bathymetry)
- Operational and legal constraints
- Obstructions and archaeology
- Siltation rates
- Environmental constraints.

## ADVANTAGE

M. Côté says it is important for the client to share information with the contractor at the earliest stage of the project. In this way, the client can take advantage of Ocean's knowledge and expertise. Ocean can reduce the risk factors, thus keeping down costs. It can advise on when a suitable dredger will be available and how much it will cost to mobilize. And it can recommend a financing solution such as Canadian Commercial Corporation (CCC) or Export Development Canada (EDC).

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## DREDGING DUTCH DREDGING

# Aruba project brings double benefit to port



**The Port of Oranjestad in Aruba will benefit in two important ways as the result of a key project by Dutch Dredging. First, the port will be able to receive Freedom-class cruise ships in time for this coming season; and the dredged material is being used to provide additional port land.**

The project was commissioned by the Aruba Ports Authority, with work expected

to be completed by the end of April. It involves maintenance dredging of the cruise ship channel at Oranjestad and land reclamation in the industrial area of Barcadera.

The channel is being deepened to 12.0 meters to accommodate Freedom-class cruise ships, with the first of this class due to call in summer 2018. The work has been carried out by the trailing suction hopper dredger 'Elbe', which sucks up the sand from the seabed in a similar way to a vacuum cleaner and loads it into the vessel's own hopper. Some 200,000 cubic meters of sand was due to be dredged from the channel and carried away.

## SOLUTION

Aruba Port Authority has found a sustainable solution by reusing the dredged material to reclaim land at the industrial port of Barcadera, which is the subject of a long-term expansion plan. The current reclamation project will provide an additional 50,000 square meters of land.

The sand in the hopper is mixed with water to create

## ABOUT THE COMPANY

Dutch Dredging (Baggerbedrijf de Boer) is a family-owned company based in Sliedrecht in the Netherlands. It employs about 200 professionals. It is involved in projects around the world including the Caribbean and South and Central America as well as Europe and Oceania. The company specializes in maintenance and capital dredging, beach replenishment, land reclamation and maritime and survey services.



a mud fluid which is pumped through a pipeline system onto the reclamation site. A silt screen and other measures will be used to protect the seagrass and local species from the silt.

After the land reclamation of sand has been completed, the embankment will be protected with geotextile and stones.

[www.dutchdredging.nl](http://www.dutchdredging.nl)

## RECENT PROJECTS

Projects undertaken by Dutch Dredging in the Caribbean region include:

- **FRENCH GUIANA:** Long-term maintenance dredging and maritime services
- **SURINAME:** Recurring maintenance dredging of private mooring berths
- **ARUBA:** Maintenance dredging of cruise terminal and land reclamation
- **MEXICO:** Beach replenishment.



# Eco-friendly invention will help sustain coral

**T**he Dutch dredging contractor Van Oord sets great store by its environmentally responsible approach to the development of maritime infrastructure. And in this regard the Rotterdam-based company has achieved a major milestone in The Bahamas by creating a so-called Coral Engine – believed to be the first of its kind anywhere.

The Coral Engine is an underwater nursery designed to function as a sustainable source of fast-growing coral that can be used to rehabilitate existing coral reefs or to create new ones. This solution can be applied world-wide, but is of particular interest in the Caribbean.

Mark van Koningsveld, research and development engineering manager at Van Oord, said: "When we carry out dredging and construction work, it's vital to consider the interests of the environment and local stakeholders. The Bahamas are famous for their white-sand beaches, azure sea and fabulous marine life, making them a paradise for

divers and snorkelers. Before we started working in this beautiful environment, we took various measures to protect the vulnerable surrounding coral reefs. For example, we relocated coral situated in the footprint of the access channel to a host site nearby to ensure their preservation. We worked with a coral expert and divers to relocate more than 900 pieces of coral from the projected route of Coral Harbour's access channel. Under controlled conditions, the coral was moved to a nearby reef that provides a similar habitat. In addition, Van Oord developed the Coral Engine."

## NURSERY

Mr van Koningsveld went on: "The Coral Engine is an underwater coral nursery that contains both locally sourced coral fragments and sexually produced coral juveniles of varying ages. We shipped our mobile coral breeding facility, Reef Guard, to the Bahamas and produced thousands of sexual recruits from local spawning events on our preconditioned settlement substrates. As the

corals grow, the Coral Engine is a continuous source of outplantable corals that allow local stakeholders to create and if necessary rehabilitate their coral reefs."

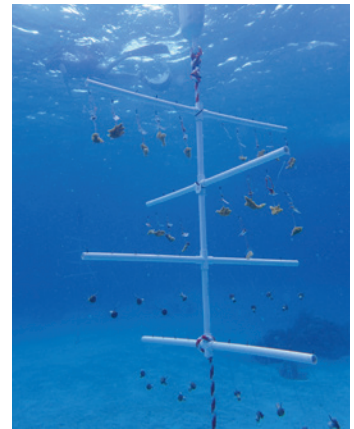
The R&D team at Van Oord believes that all Caribbean countries could really benefit from this smart solution to take care of their vulnerable environments.

"As a family-owned business founded 150 years ago, Van Oord plays an active role in caring for the planet now and in the future by guarding and protecting the environment," said Mr van Koningsveld. "We strive to minimize the potential negative impact of our work on the marine environment and encourage our ingenious engineers to develop more sustainable working methods and innovations. The Coral Engine and associated deployment of the Reef Guard are excellent examples of this. They showcase our marine ingenuity."

## RIGOROUS

In 2014 the government of The Bahamas signed an agreement with Van Oord and Damen Shipyards covering a rigorous upgrade of the naval bases on three islands and the delivery of a fleet of new patrol vessels.

Van Oord's area manager, August Runge, said: "Our scope in the Sandy Bottom project included dredging, constructing several breakwaters and quay walls and corresponding civil engineering works. The work was spread out over sites up to 700 km apart. By the end of



2017 we finished the construction work."

The project team received the Hansje Brinker Award for its safety and environmental attitude. The team went to great lengths to prepare for storms, including Hurricane Irma, and gave top priority to safety, which resulted in zero lost time incidents.

In addition, Van Oord has recently carried out various other projects in the Caribbean using the trailing suction hopper dredgers 'Dravo Costa Dorada' and 'Lelystad', which are permanently available in the region for port dredging, land reclamation and beach nourishment projects.

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





# 48TH ANNUAL GENERAL MEETING CARIBBEAN SHIPPING ASSOCIATION

## PANAMA, 8-10 OCTOBER 2018



- The CSA's 48th Annual General Meeting is to be held from the 8-10th of October at the Sheraton Grand Panama, Panama City.
- 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.



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# Port St. Maarten: THE ROAD TO RECOVERY



**A**s is already well documented, last September's devastating Category 5 hurricanes, Irma and Maria, wreaked havoc across large parts of the Caribbean.

Many islands felt the full impact of either Irma or Maria and in some cases both. One of the hardest-hit of these islands was Dutch Sint Maarten/St Martin. Hurricane Irma is estimated to have caused around US\$ 3 billion in damage to the island's tourism-led economy and damaged some 70 per cent of its infrastructure.

The vast majority of the island's cruise traffic has centred on Port St. Maarten and, as a consequence, the

Dutch side of the island suffered most from the drop-off in arrivals in the wake of Irma.

Over the past 10 years or so, privately held Port St. Maarten had pursued a cruise strategy focused on attracting volume traffic and leveraging on the island's keenly priced duty-free shopping at its attractive Harbour Point Village and duty-free capital of the Caribbean, Philipsburg. All of this was partially damaged by Irma on 6 September.

Luckily, Port St. Maarten's cruise terminal was not quite as severely affected as some other parts of the island, but badly damaged it was. And it would be around three months after Irma before cruise ships were able to

call once again.

Port St. Maarten business development officer Alex Gumbs spoke to Caribbean Maritime about the hurricane, the events of the past few months and where Port St. Maarten goes from here.

## IMPACT

First, Mr Gumbs detailed the impact on the port's facilities: "Damage to Pier 1 was caused by one of the expansion joints lifting. This has been repaired since the beginning of March and we are now 100 per cent operational with six berths available. One of the security screening booths for the Genesis-class ships was destroyed. This has since been restored. Wooden kiosks were damaged and these are all now repaired and open for business. In terms of cargo, there was an area at the terminal where bricks were washed away due to the high swells of 8 meters plus. There was minor electrical

damage to the cranes which is now all repaired."

Mr Gumbs said no level of planning could have anticipated a hurricane of such power and intensity. "We had contingencies in place with a well-structured hurricane plan. However, the sheer force of the storm, with winds of more than 185 mph, caused damage that no one could have prepared for."

As it was, cruise ships would not return to St Maarten until 4 December when the 930-passenger 'Viking Sea' berthed. The following day, Marella Cruises (formerly Thomson Cruises) called with its vessel 'Marella Discovery'.

And the initial reaction of these pioneering passengers? Mr Gumbs told Caribbean Maritime: "They were amazed with the swift rebound and with the courtesy of our citizens, merchants and tour operators. A lot of these passengers committed to spreading the positive word among their

**Hurricane Irma is estimated to have caused around US\$ 3 billion in damage to the island's tourism-led economy and damaged some 70 per cent of its infrastructure**





friends and family. The ratings from the various cruise lines also gave an indication that the island had returned to its pre-Irma situation."

## NORMALITY

By Christmas things were starting to get back to some sort of normality and St Maarten welcomed five ships with around 10,000 passengers (and crew) which called on 25 and 26 December.

So where does Port St. Maarten go from here – a

destination that in the past has seen over 2 million cruise passengers in a single year?

Mr Gumbs said: "From a passenger arrival perspective, it is dependent on inland developments, the overall recovery and the availability of tours. We expect to return to more than 1.5 million passengers in the 2019/2020 season. In 2018 we will receive approximately 1.2 million passengers. By contrast, cargo is over-performing as the build-back efforts and a construction boom commences."

## NORMAL SERVICES RESTORED

In Sint Maarten it was not just the port area that was badly hit. Princess Juliana International Airport (SXM) was equally affected – and is still affected. Temporary air conditioned arrival and departure lounges have been erected pending the reconstruction of the main terminal building, which is not due to reopen until late this year or early 2019.

But, in testament to the work of the local authorities and the Dutch government, electricity had been restored to 95 per cent of the island by the first quarter of 2018 and most people had water and telecommunications. Around 85 per cent of downtown Philipsburg is now open and 80 per cent of tours are running. Hotels have begun to reopen or announced firm plans to do so, but it's a long road back for some. While the Oyster Bay Beach Resort began welcoming guests in April, two of Sonesta's properties will not reopen until late this year or early next and the Great Bay Beach Resort, too, will reopen in early 2020.





# Accommodating our Future



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SURINAME**  
Port Management Company  
[www.havenbeheer.com](http://www.havenbeheer.com)

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# RISE OF THE MACHINES

## Why maritime drones will soon be commonplace

Everybody wants to talk about drones. They are new and exciting and perhaps equally capable, intriguing and fun. There are profound new applications for drones to enhance maritime operations - but with those tangible benefits comes an entirely new threat vector previously unforeseen by even the wildest of imaginations.

**R**egardless of any preconceived notions you may have about drones and their uses, no one can dispute that the technology is here to stay and we are only just beginning to explore their uses.

What is a drone? The term is commonly used to describe unmanned aerial vehicles and unmanned aircraft systems (UAVs

and UASs). In fact, the terms 'drone', 'UAV' and 'UAS' are often used interchangeably to describe the same thing - an aircraft without humans onboard with ground-based control. Drones are appealing to send to places that are typically too expensive, dangerous or monotonous to send a manned aircraft. However, drones do





## Port facilities and terminal operators are just now beginning to explore the use of drones to survey wide spaces within their area of responsibility

not typically operate out of the sight of the controller with autonomy.

Although the vast majority of drones are flown by private hobbyists, they are being used increasingly for military and commercial purposes. With diverse applications such as wildfire mapping, disaster management, law enforcement/security monitoring, infrastructure inspection, media coverage and freight transport, it is estimated by the Association for Unmanned Vehicle Systems International (AUUSI) that 100,000 new jobs will be created by 2025 as a direct result of drone integration within the National Airspace System, generating an impact of US\$ 82 billion.

In the maritime realm, new categories of drones are emerging, such as unmanned surface vehicles (USVs) and unmanned underwater surface vessels (UUSVs), which

have valuable applications as military, security and environmental force multipliers. Drones are now capable of bridge, pier and vessel hull inspections, thus reducing the need to use divers for such potentially dangerous operations.

### DRONE USE AT TERMINALS AND PORTS

Port facilities and terminal operators are just now beginning to explore the use of drones to survey wide spaces within their area of responsibility, most commonly for facility inspections and operational aids rather than security applications.

"Drone use for ports is still in its infancy, but there has been a lot more recent interest," said Ryan English, chief executive and co-founder of FLYMOTION Unmanned Systems, a leading drone solution and

services company with its head office in Tampa, Florida. "From my perspective, there is a lot of value in their use for inspection of tanks and other critical elements of a port, but there is also a security standpoint. A lot of ports and directors are still trying to understand the technology and see the value and benefit of it."

Asked about the commercial maritime use of drones in the Caribbean at the current time, Mr English said there had been inquiries, but not widespread deployment. However, he anticipates a significant increase in the future as ports and facilities begin to venture into drone operations and see their value.

"To me, [a drone] is an absolutely advantageous tool because there are large facilities and they are required by a variety of regulations to be inspected," he said.





© Photo credit Ryan English

is not the core business of a port to start an aviation operation.”

## PRYING EYES

While offering profound and tangible benefits in terms of enhancing port and terminal operations, these new vehicles can also be used for malice towards the very critical infrastructure that needs protection. Drones essentially pose three main threats to maritime ports and facilities:

- They can crash into an object
- They can drop contraband or other unwanted items into a secure area
- They can be used for visual and/or electronic surveillance of a secure area.

Mr Todd said: “There has been interest from counter-UAS folks to keep prying eyes out. It is disconcerting because you don’t know if

regulatory environment opens up, which may happen as soon as within a few months. Of the Caribbean, he said: “Caribbean nations are aware of the drone threat, but they aren’t eager to invest in it yet. Generally, there is a wait-and-see approach to emulate US policies.”

## A VISION FOR THE FUTURE

Experts agree that the commercial maritime industry has just passed through a new threshold. It is only a matter of time before these tools will become a common sight as they patrol a fenceline, inspect a tank farm, sweep a vessel hull and, yes, even deliver a pizza lunch. Only now are we beginning to explore the applications of these technologies.

The drone industry is riding a wave of optimism and it is tempting to compare this electronic revolution to others we have recently experienced.

“It is a lot like the internet of 1996 – like AOL [America Online], a walled garden of information – and since then internet use has exploded,” said Mr Todd. “It is a key of what is to come. The future is going to be when we have autonomy and out-of-line-of-sight operation. This is a ways off and that’s what everyone is looking for.”



**By William Lusk**  
Program Manager,  
O.C.E.A.N.S. LLC

“Fixed-base cameras are great, but they have a limited view angle.”

Christopher Todd, president of Airborne Response, based in Miami Beach, Florida, said: “The way it seems to start, the port director or someone in the port office will have a son with the DJI Phantom [a popular quadcopter drone equipped with a camera] and start experimenting with different things and maybe the port will invest in a different application.”

Mr Todd stresses that, after a commercial entity sees the value of using a drone to augment its operations, it’s important to seek the right guidance to ensure proper investment and training. “Technology is evolving at such a rapid pace that it quickly becomes outdated with better technology,” said Mr Todd. “Sometimes it’s a lot easier to hire out than to build your own program. It

a nearby drone is a friend or a foe.”

Even if a drone flying overhead could be identified as either friendly or unfriendly, chances are that not much can be done to mitigate any threat.

Many companies offer counter-UAS technological solutions such as FLYMOTION incorporating radar, frequency detection, jamming and geofences to detect drones and deter them from flying in unauthorized areas. However, depending on the jurisdiction, legal guidelines prohibit the use of interfering signals from the ground. In the United States, for example, drones are required to be registered by the Federal Aviation Administration and any interference with a registered aircraft may be considered hijacking, resulting in stiff penalties.

Mr Todd predicts that the counter-UAS industry will grow exponentially once the



# It pays to know how well you're performing



By Luc Castera\*

Founder & Chief Executive Officer  
Octopi

A key performance indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives. KPIs can be used to evaluate how successful a company is at reaching specific targets. A high-level KPI may focus on big picture performance goals, while a low-level KPI may focus more on the daily processes in each department of an organization, such as marketing or sales.

For port terminals, measuring KPIs to improve operational efficiencies and productivity is crucial. With vessel sizes on the rise, shipping companies are more demanding than ever. However, selecting high-quality KPIs isn't easy. The best way to evaluate the relevance of a KPI is to use the SMART criterion. SMART is an acronym that typically stands for Specific, Measurable, Attainable, Relevant and Time-bound. You can't manage what you don't measure, so when the time comes, use these five conditions to determine the best KPIs for your organization:

- Is your objective Specific?
- Can you Measure progress towards that goal?
- Is the goal realistically Attainable?
- How Relevant is the goal to your organization?
- What is the Timeframe for achieving this goal?

Effectively implementing KPIs requires a well-thought-out strategy. Too often, companies blindly adopt industry KPIs without reflecting on their own organization's goals. Before applying KPI measurements, organizations should start with

## 'If you can't measure it you can't manage it'

- Peter Drucker, business guru and author



the basics and truly understand what their goals are, how they plan on achieving those goals and the members of the organization that will be in charge of implementation and measurement.

For port and terminal managers, and anyone seeking to improve operations and business performance drastically, KPIs are one of the most efficient tools with which to measure and improve terminal-wide performance. Here are six of the key primary indicators every port terminal should track closely:

### 1. CRANE PRODUCTIVITY

Crane productivity describes how quickly your port loads and unloads containers off a vessel. Measuring crane productivity is crucial because shipping companies want their vessels to stay on schedule and expect terminal operators to complete their loading and unloading quickly so that the vessel can move to the next port of call.

Tracking crane productivity as one of your six key primary indicators is SMART because time is money and shipping lines will always choose to work with the fastest terminals. Progress for this goal is measured by your port's efforts to reduce load and unload times. This information is very relevant for shipping companies for decision-making purposes.

### 2. CONTAINER DWELL TIME

Container dwell time (CDT) describes how long a shipping container stays at a port terminal. The shorter the CDT the higher the potential utilization of the port terminal. Measuring the average CDT is one of the most cost-effective ways to optimize terminal output. More specifically, at terminals where the availability of stacking area and storage yards is limited, even the most marginal reductions in CDT can have a major impact on productivity.

Tracking and monitoring CDT is SMART because it allows port terminal operators and their teams to define factors impacting the CDT and better estimate how long containers should remain in the yard. Monitoring CDT is one of the best ways ports can improve their operations and know exactly how much of their space is being used now and will be used in the future.

### 3. REEFER DWELL TIME

Reefer dwell time (RDT) describes how long a reefer container stays at a port terminal. A refrigerated container, or reefer, must be measured differently due to the fact it contains temperature sensitive cargo and may require access to an external power supply.

Separate tracking of RDT is SMART because it allows port terminal operators to generate key information for monitoring and optimizing the logistics and management of cold chain assets and resource. Measuring the RDT can complement the reporting of reefer temperatures and any abnormal or excessive fuel uses.

### 4. CONTAINER TRAFFIC

Measuring container traffic refers to how much container traffic is going through a terminal at any given time. Container traffic can be measured in TEU or number of moves and it should be analyzed daily, weekly, monthly and yearly.

Container traffic measurement is SMART because it allows port terminals to analyze how they are doing compared with traffic numbers weeks, months or years ago. It also gives port terminal operators a quick way to see how the current season's operations are going. Typically, it is also the first number used when introducing your port terminal and discussing your operations. Container traffic is always asked for by anyone interested in your port, so it's important to stay updated on this number and be ready to give it out.

### 5. TRUCK TURNAROUND TIME

Truck turnaround time refers to the amount of time truckers are spending at your terminal when they come to pick up and drop off containers. This is an important KPI to measure because it greatly affects a trucking company's bottom line. As a key player in the supply chain and an important customer of the port terminal, you want to help truck operators succeed and to provide them with the best service possible. If they can make more trips per day to the port because you've reduced the time it takes for them to visit, they will love working with your terminal instead of the competitors'.

Tracking truck visit time is SMART because it can help your port terminal reduce costs for your clients. When clients are happy with your terminal operations, it can also help you garner recommendations and encourage other shipping companies to choose your terminal.

### 6. NUMBER OF GATE MOVES

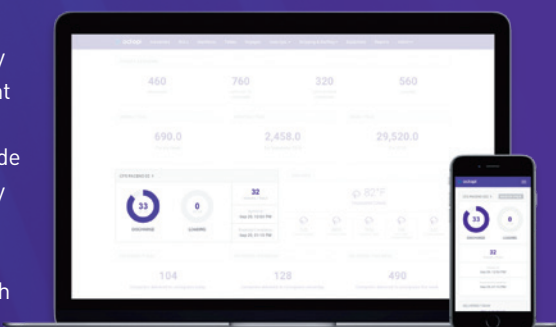
The last KPI your port terminal should monitor closely is the number of gate moves you complete per day (in and out). This is an incredibly valuable metric because it not only helps port terminals understand their volume in real-time but also helps control overall operations.

Measuring the number of gate moves is SMART because it can help ports reduce congestion and increase the average number of gate moves per week – and therefore boost the port's overall productivity.

Of course, there are other KPIs that port terminals can track such as utilization of equipment and crane monitoring and scheduling, but these are the key primary indicators that port terminals can use to improve operational efficiencies and boost productivity.

For port and terminal managers, operators and anyone seeking to improve port operations and business performance drastically, Octopi's terminal operating system can help you easily track these KPIs to improve terminal-wide performance. The Octopi platform tracks and manages all port operations and live productivity KPIs. You can manage everything from equipment and employees to vessels and cargo from one device in real-time.

**\*Luc Castera is the founder and CEO of Octopi, a modern Terminal Operating System (TOS) provider.**





# PORT BRIEFING



2

## JAMAICA

### KFT UPGRADES GIVE BOOST TO KINGSTON

With the completion of various upgrades to section one of the Kingston Container Terminal, operator Kingston Freeport Terminal Ltd (KFT) is now able to accommodate even larger containerships.

KFT, which manages the terminal under a 30-year concession, says the upgrading, along with the completion of dredging to deepen the access channel, will allow Kingston to receive vessels of up to 14,000 TEU.

With the first section complete, KFT will now move to complete section two of the US\$ 150 million upgrade of the facility's south terminal by the end of this year.

KFT believes these upgrades, along with the acquisition of new gantry cranes and associated cargo handling equipment, will attract more transshipment business to the Port of Kingston.

1

## USA

### PORT MANATEE TO BE SUPPLY HUB FOR WFS

Miami-based World Fuel Services (WFS) has chosen Port Manatee as its new bunker supply hub for the Tampa Bay area.

WFS, which sells bunkers in over 200 countries and territories worldwide, has established its latest storage and supply operation for both fuel oil and marine diesel oil (MDO) at Port Manatee after a rigorous evaluation. The WFS operation will mean a further increase in the handling of liquid bulk cargo for Port Manatee.

WFS provides bunkering for both cruise ships and cargo vessels throughout Tampa Bay via two dual-capacity tug/barge units. It operates in partnership with Vane Brothers, a long-established maritime services company based in Baltimore, USA, with around 130 vessels operating out of Baltimore, New York, Philadelphia, Norfolk, Charleston, Savannah and Jacksonville.

Port Manatee is the closest US deepwater port to the expanded Panama Canal. It has 10 berths with a draft of 40 ft for handling containers, bulks, breakbulk, heavy lift, project and general cargo.

3

## USA

### PPX CAR CARRIER DEBUTS AT PORT CANAVERAL

In January this year Port Canaveral in north-east Florida welcomed its first post panamax (PPX) car carrier with the arrival of the 7,400 vehicle capacity 'MOL's Brooklands'. The vessel discharged over 300 new Mexico-built vehicles at Port Canaveral's dedicated AutoPort facility.

The 2017-built 'MOL's Brooklands' is almost 200 meters in length with a beam of 38 meters.

The recently completed deepening of the West Turning Basin has allowed Port Canaveral to receive deeper-draft vessels equal to the authorized harbor channel depth of 44 ft.





ANTHEM OF THE SEAS

4

## USA

### SPECIALIST BERTH TO HANDLE PARTS FOR SPACECRAFT

A new multipurpose berth at Port Canaveral will be specially constructed to handle commercial spacecraft components as well as other project cargo.

Construction of the port's new North Cargo Berth 8 is under way in response to an all-time-high demand for more quayside space. This landside and waterside investment is expected to provide the infrastructure and flexibility to meet a growing demand for diversified cargo handling.

A 275 meter seawall and a planned 30 meter pier extension will allow vessels of up to 260 meters in length to be accommodated. The berth will be dredged to 35 ft MLLW and will be designed to accept heavy aerospace cargo and other project cargoes.

The Tampa office of the Houston-based Orion Marine Group has won the US\$ 17.9 million contract for the bulkhead and seawall construction and for the relieving platform and dredging. The project was due to commence in March 2018 with a completion date in mid 2019.

5

## ST LUCIA

### LARGEST-EVER CRUISE SHIP AT PORT CASTRIES

The Royal Caribbean vessel 'Anthem of the Seas' became the largest cruise ship to call Port Castries in January this year following the recent completion of works to extend the Pointe Seraphine facility.

The US\$ 18.8 million project, undertaken by the Dutch company Ballast Nedam, involved a 50 meter extension to Berth 1 and the construction of three new mooring dolphins.

It was the largest project to be undertaken by the Saint Lucia Air & Sea Ports Authority in 20 years and was financed through the National Insurance Corporation.

6

## CUBA

### TERMINAL GIVES NEW STATUS TO SANTIAGO

A project to refurbish and modernize the port of Santiago de Cuba is set for completion in June with the opening of a new multipurpose and container terminal.

The US\$ 120 million terminal is 250 meters in length and is being dredged to a depth of 14.0 meters. It will be equipped with five ship-to-shore gantry cranes.

Once the work is complete by Chinese contractors, Santiago de Cuba will be the nation's second-largest port after Mariel. The port is located close to main international maritime routes, while its sheltered bay is home to several key local industries, including a cement factory, an oil refinery and two shipyards.



ATGImages / Shutterstock.com

ST JOHN'S, ANTIGUA

7

## ANTIGUA & BARBUDA

### MAJOR PORT PROJECTS UNDER WAY AT ST JOHN'S

A port modernization project at St John's, Antigua, finally got under way early this year. The US\$ 90 million project, the largest public-sector investment ever undertaken by the government of Antigua & Barbuda, will dramatically transform the port's cargo handling capability with a view to attracting container transshipment traffic to Antigua.

At the same time, US\$ 80 million is being spent on a fifth cruise berth at Point Wharf designed to accommodate Oasis-class ships. This project also involves significant land reclamation work to improve pedestrian and vehicle flows, town aesthetics, tour operations and shopping. The new berth is expected to be fully operational in time for the 2018-19 season.

Both facilities are being built by the state-owned China Civil Engineering Construction Corporation as part of a deal signed in late 2014 to redevelop the St John's waterfront and coastline.



## CRUISE NEWS

1



### CARNIVAL LINE GOES BIG ON CUBA

Carnival Cruise Line is adding a further 20 voyages from Tampa to Cuba in 2019 to be undertaken by the 'Carnival Paradise'. This is in addition to the 17 voyages already announced from Miami to Cuba for 2019 with the 'Carnival Sensation'.

The five-day cruises on the 'Carnival Paradise' will depart Tampa on Saturdays and will feature a day-long or a full day and overnight stay in Havana, plus calls in Key West and Cozumel.

Passengers on Carnival's dedicated Cuba-bound cruises can choose from about 20 shore excursions. There will also be a variety of Cuban-themed activities and entertainment on board.

2

### RECORD WEEKEND FOR TAMPA BAY

Port Tampa Bay set a new record when the west coast Florida port handled six cruise ships over one weekend this spring.

The port also set another record with over 29,000 passengers arriving or departing by the six cruise ships over the two days. The previous single-weekend record was 22,960 back in February.

The six comprised the 'Carnival Paradise', 'Carnival Miracle' and 'Brilliance of the Seas' on the Saturday and the 'Norwegian Dawn', 'Rotterdam' and 'Rhapsody of the Seas' on the Sunday.

These new records come on top of a 26 per cent increase in cruise passenger traffic in 2017 at Port Tampa Bay. So 2018 looks set to be another bumper year.



Yogen Belich/Shutterstock.com

1

### SANTO DOMINGO SET FOR REPICA MEETING

Víctor Gómez Casanova, director of the Autoridad Portuaria Dominicana (Apordom), has stressed the importance of maritime trade for the Dominican Republic's future economic growth and has praised the government's push to bolster the systems to integrate the nation's ports.

The Apordom director was speaking in April as he announced details of the 40th annual Central American Isthmus Port Meeting (Repica), to be held at the Crowne Plaza Hotel in Santo Domingo from 24 to 27 July. The event is organized by the Comisión Centroamericana de Transporte Marítimo (Cocatram).

Mr Gómez Casanova said that main actors in the region's maritime and port industry would discuss key issues leading to the development and growth of the sector. "It's the only event that brings together the companies and port authorities of Central America and the Dominican Republic," he said.

2

### VENEZUELA SHIP AGENTS WILL CHARGE IN PETROS

In an official bulletin in March, the Venezuelan government told local shipping agencies that the Instituto Nacional de los Espacios Acuáticos (INEA) would collect payment for services rendered to foreign-flag vessels in the form of petros. Launched in February, the petro (or petromoneda) is the first cryptocurrency issued by a state. Backed by Venezuelan oil assets, it is intended to supplement the falling value of the bolívar fuerte and to provide a means of circumventing United States-led sanctions. Venezuela intends the petro to be equal in value to a barrel of oil.



3

## ACMF'S NEW BOARD MEMBERS

Vincent M. DeOrchis and Robert E. O'Connor, of the United States law firm Montgomery McCracken, have been appointed to the board of the American Caribbean Maritime Foundation, set up in 2015 to support and promote the Kingston-based Caribbean Maritime University.

The ACMF is the only entity dedicated to sponsoring academic scholarships and grants for maritime students in the Caribbean. At its second annual reception in November last year, it celebrated the accreditation of the CMU (formerly the Caribbean Maritime Institute). The reception in New York City was sponsored by Montgomery McCracken.

4



## BOOST FOR T&T MARITIME SECTOR

The Government of Trinidad & Tobago has formally announced its backing for the twin island nation's maritime industry, which is to be further developed. The industry is already a major contributor to the national economy and supports both the energy and non-energy sectors.

The government believes the regional and global connectivity of Trinidad & Tobago, its healthy export base, highly educated work force, vibrant energy sector and low energy costs are all key factors in making it an attractive location for maritime services.

Special emphasis will be given to port operations, shiprepair and marine services such as ship registration, bunkering, cold storage, logistics and offshore bulk trans-shipment.

# STARBOARD BRIEFING

5

## 'NO CRUISE WEDDING' LAW HAMPERS CAYAN REGISTRY

The Cayman Islands ship registry is failing to attract cruise ship operators, says Jo Walton, chief executive of the Maritime Authority of the Cayman Islands (MACI). This is because local laws effectively prevent weddings from being conducted on board Cayman-registered vessels.

The Cayman Islands has already removed one impediment to cruise ships using the registry when the British Overseas Territory amended its gambling laws to allow vessels with casinos to register. But no cruise ship has subsequently joined the Cayman registry and Mr Walton says it remains an untapped market.

Under current matrimonial legislation, any locally registered cruise ship would need a licensed marriage officer on board to preside over ceremonies. In effect, this makes on-board marriage unlikely, so the law would have to be amended to allow Cayman-registered vessels to offer wedding services.



6

## GEEST LINE HALTS MARTINIQUE CALLS

Geest Line has announced the suspension of calls at Martinique, blaming its decision on current market conditions. Its last call there was in April. The company says that extending its North Europe-Caribbean service to Colombia has meant it can no longer reliably serve Martinique.

7

## LAWYER JUDY WINS MARITIME AWARD

Lludelis (Judy) Espinal, president of Santo Domingo-based E&M International Consulting, has won the 2017 Maritime Award of the Americas in the category of 'Outstanding Women in the Maritime and Port Sectors'. It was awarded by the Inter-American Committee on Ports (CIP) with support from the Organization of American States (OAS) Inter-American Commission of Women. The CIP has a mission to empower female professionals in the port sector of the Americas. The award recognises the winner's professional contribution to the development of a competitive, secure, sustainable and inclusive port sector in the Americas.





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# GLOBAL UPSWING PULLS CARIBBEAN CHARTER MARKET ALONG

## CONTAINER CHARTER MARKET REPORT FOR THE AMERICAS / CARIBBEAN REGION, JANUARY TO MARCH 2018

During the first three months of the year, a very dynamic market with strong demand for smaller container tonnage, especially in Asia, caused charter rates to increase substantially. The Caribbean market presented itself relatively balanced and actually registered a small decline of three fewer vessels employed on Latin America related services (up to 3,000 TEU) at the end of March compared with the end of 2017. In intra-Europe and intra-Asia services, however, 22 more ships are trading now than at the end of last year. As a consequence, ships that left the Caribbean trading area due to upcoming special surveys did not all return after leaving the dry dock, as the Caribbean 'premium' had pretty much disappeared by the end of March.

Throughout the first quarter of the year, barely any ship, regardless of size, had run into a spot position. This good utilization, in addition to higher rates, also led to periods with reduced flexibility.

At the beginning of the year, ships of 2,500 TEU employed in high reefer trades were still able to command a bonus of around US\$ 2,000. With the general market increase, however, standard tonnage had caught up by March and also managed to

achieve earnings in the US\$ 11,000 levels. A very interesting development in the high reefer segment has been that one of the fruit majors for the first time utilized two gearless 2,700 TEU high reefer ships to run a service between the US East Coast and Central America.

The 1,700 TEU segment also continued the positive development from the end of last year and moved from high US\$ 8,000 levels to over US\$ 10,000 by March.

## OUTPERFORMED

Once again, the 1,300 TEU high reefer category outperformed the slightly larger ships and moved from mid US\$ 8,000 to mid US\$ 10,000 levels. Charter rates had even reached levels where some charterers were reluctant to fix periods longer than around six months as the rates were deemed to be high. Some pressure on this segment could result from the upcoming closure of one reefer-focused transatlantic service which had been run mainly with such vessels.

The market for 1,100 TEU vessels was most active during January, when several ships were extended at high US\$ 7,000 to low US\$ 8,000 levels. Modern, more fuel-efficient ships remained popular and were able to fix for about US\$ 2,000 more than a standard 1,100 TEU design. In February and March the market was quieter, though the few remaining ships were even fixed for higher rates reaching close to US\$ 9,000.

The trend towards more gearless ships trading in the Americas almost continued as well in the 1,000 TEU size segment, but two 'European design' ships with ice class and good 45 ft container intake, intended to run a Caribbean string, failed on subs.

Again, a 700 TEU gearless ship positioned from Europe for a new US-Mexico service. Otherwise, little activity showed in the category below 1,000 TEU. In particular, the very small ships of under 800 TEU continued their decline in numbers as good employment opportunities could also be found in the Mediterranean. As of the end of March, fewer than 10 charter ships in this size range remain. Charter rates stayed relatively strong, with levels between mid US\$ 6,000 and mid US\$ 8,000 depending on exact size and specifications.

The US administration has requested a study into the effects of waiving the Jones Act for services to Puerto Rico. At first this appears to be a positive note for container liner services, but as currently there are only two strings running directly from the US, the effect from such a loosening of the Jones Act would be very limited.

## MACROECONOMICS

Strong global economic growth figures are now overshadowed by the trade war between China and the USA. Although not directly affecting the Caribbean economies, less global trade is likely to slow down global economic growth, which in turn will have an adverse effect on the demand for Caribbean products.

GDP forecasts for the Caribbean and Latin America are positive, with +1.9 per cent in 2018. Those numbers, however, lag well behind the global average of 3.9 per cent. The reasons for this gap are seen in a lack of infrastructure investments and





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inefficient tax systems and regulations, which often create the wrong incentives for businesses.

On a positive note for trade, the Caribbean Export Development Agency has set up a cooperation with the EU to give financial grants to private businesses which manufacture goods for export.

Good signs are coming from Mexico, where despite all the talks about tariffs the manufacturing sector is expected to increase by 3.4 per cent in 2018 – even stronger than the 2.7 per cent rise in overall GDP.

Colombia is forecast to slow down some, but should still produce growth figures of around three per cent. Due to those reduced expectations and the lessening inflation, Colombia's sovereign credit rating has been downgraded. Brazil also had to accept a downgrade of its debt worthiness. Overall, though, the average rating of the major Latin American countries is much better than a year ago.

In Venezuela, the situation is turning from bad to worse. About 10 per cent of the population has fled the country due to lack of food and other basic necessities. The political opposition estimated the economy to have shrunk in 2017 by 13 per cent. The number of regular container services calling at a Venezuelan port has come down to just seven with only 11 ships involved. Neighboring Colombia, by contrast, currently has 24 services with over 50 ships deployed just for intra-Americas trades.

The Cuban economy is struggling as well. Waning energy support from Venezuela, slow reforms, no progress in relations with the USA and natural disasters have all had an impact on growth prospects. In 2018 the economy of Cuba is expected to grow by just one per cent.

## SALE AND PURCHASE OF CONTAINER TONNAGE

A lot of ships in the size range below 3,000 TEU have changed hands during the first quarter of 2018. The combination of rising charter market levels and some aggressive buyers with large financial reserves has driven up prices substantially. For example, one 2008-built 2,500 TEU ship, trading in the Caribbean, has been sold twice within one year, first for about US\$ 5 million and then for around US\$ 10 million.

The four 1,100 TEU vessels ordered

## SELECTED CONTAINER FIXTURES

### SUB 1,000 TEU – GEARED, CELLED

Jan 18	<b>S. Rafael</b> 501 TEU / 275@14 / 15on17 / 84rp	8 months	US\$ 6,000	p/d
Jan 18	<b>Regula</b> 683 TEU / 402@14 / 17on28 / 118rp	6-7 months	US\$ 7,600	p/d
Feb 18	<b>Vega Scorpio</b> 966 TEU / 604@14 / 17on44 / 252rp	6 months	US\$ 8,550	p/d

### 1,100 TEU – GEARED, CELLED

Jan 18	<b>Vega Zeta</b> 1118 TEU / 712@14 / 20on42 / 220rp	3-9 months	US\$ 8,200	p/d
Jan 18	<b>Taipei Trader</b> 1102 TEU / 705@14 / 18on25 / 220rp	6-9 months	US\$ 10,500	p/d
Feb 18	<b>Sonderborg</b> 1019 TEU / 700@14 / 19on37 / 220rp	11-13 months	US\$ 9,250	p/d

### 1,300 TEU – GEARED, CELLED

Feb 18	<b>Warnow Dolphin</b> 1296 TEU / 958@14 / 19on45 / 390rp	10-12 months	US\$ 9,700	p/d
Mar 18	<b>As Fortuna</b> 1338 TEU / 925@14 / 20on52 / 449rp	5-6 months	US\$ 10,500	p/d

### 1,700 TEU – GEARED, CELLED

Jan 18	<b>Viking Merlin</b> 1684 TEU / 1270@14 / 19on55 / 345rp	2-5 months	US\$ 9,375	p/d
Feb 18	<b>Hansa Freyburg</b> 1740 TEU / 1330@14 / 21on64 / 300rp	5-7 months	US\$ 9,750	p/d
Mar 18	<b>Maersk Wilmington</b> 1700 TEU / 1186@14 / 20on58 / 192rp	2-4 months	US\$ 10,150	p/d

### 2,500 TEU – GEARED, CELLED

Jan 18	<b>As Cleopatra</b> 2723 TEU / 2103@14 / 22on84 / 400rp	1-4 weeks high reefer trade!	US\$ 11,500	p/d
Mar 18	<b>Spirit Of Tokyo</b> 2556 TEU / 1850@14 / 22on80 / 600rp	11-13 months	US\$ 10,750	p/d
Mar 18	<b>As Petulia / Seaboard</b> 2564 TEU / 1852@14 / 22on84 / 342rp	9-12 months	US\$ 11,400	p/d

## CONTEX

	CONTEX	12 MONTHS, 1,100	12 MONTHS, 1,700	24 MONTHS, 2,500
Jan 18	418	7,011	9,281	10,165
Feb 18	434	7,319	9,743	10,366
Mar 18	458	7,781	10,293	10,967

by an American operator, slated for early 2018 delivery, have still not been delivered yet and otherwise the global container-ship order book holds little tonnage below 2,000 TEU that looks suitable for Caribbean trading. One operator purchased a standard 15-year-old 1,100 TEU vessel, which may hint at the upcoming shortage of such tonnage in the next few years due to the increasing average age of the fleet.





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# DOES YOUR CYBERSECURITY STRATEGY INCLUDE INSURANCE COVERAGE?



**B**usinesses are now more connected than ever before. The advent of the cloud has resulted in more centralized data stores and critical business applications that are accessible from the internet.

Statistics from the United States show that over 66 per cent of American shoppers prefer electronic purchases over in-store shopping. The technology market research company Gartner has forecast a rise in the use of connected devices from about 8.4 billion in 2017 to over 20 billion in 2020 while the Institute of Electrical and Electronics Engineers (IEEE) predicts that the Internet

of Things will number over 50 billion in 2020. The shipping industry is now on a massive drive to modernize and to infuse the use of technology more deeply into its operations.

What does this mean for security? Greater exposure! Larger threat surfaces! Humongous challenges!

## WEAKNESSES

While not exhaustive, these are staggering statistics that must be the focus of any IT conversation, especially one about cybersecurity. I recently attended a seminar on cybersecurity hosted by the Port Authority of Jamaica (PAJ), delivered

by Hudson Analytix, during which several cybersecurity weaknesses in relation to the shipping community were highlighted. They included a recent spate of cyber incidents such as the WannaCry ransomware which devastated public and private organizations worldwide; the Maersk 'NotPetya' attack, estimated to have cost upward of US\$ 300 million to resolve; and the textbook case of the Antwerp cyberattack which took place over two years spanning 2011 to 2013. These are key reminders that security must be a focal point in any strategic agenda. Due to the growing levels of connectivity, threat levels have never been higher, making cyber events no longer a risk but a reality that must be countered tactically and strategically if business survival and full participation in the data revolution are to be assured.

The question is no longer whether there will be a breach, but – if not already, when? The traditional defenses are well established. Organizations install edge protection technologies such as firewalls, proxy servers, spam filters, traffic filters, etc. Internally, anti-virus and anti-malware soft-

Due to the growing levels of connectivity, threat levels have never been higher, making cyber events no longer a risk but a reality that must be countered tactically and strategically if business survival and full participation in the data revolution are to be assured



ware monitors everything. Honeypots, nets and farms are more elaborate implementations aimed at fending off attacks. However, these have proven to fall short when tackling the myriad cyber threat vectors that exist today. The Mordor Intelligence Global Cyber Security Market – Applications, Trends, Forecast (2017-2022) report estimates that in the past year over US\$ 450 billion was spent on cyberattack recovery.

## SO, WHAT ELSE CAN BE DONE?

You must infuse cybersecurity awareness as part of the organization's culture. Train and sensitize all staff on cybersecurity. Don't forget the janitors, as they usually have organization-wide access when no one else is around. Remember the C-Suite, who may not be so tech savvy and may want exceptions that may punch huge holes in your defense mechanism. Develop a cybersecurity response strategy from which should evolve a cyber incident response plan. Don't forget that you need to know the risks by assessing your vulnerabilities. Encrypting your data is no use if there is no back-up from which you can restore. Be smart about your approach. Spend your

limited dollars on the 20 per cent that will yield the most results and give the most value. Establish service level agreements (SLAs) with your suppliers that ensure disclosure if their systems are breached.

Even if you believe that your data is insignificant, and you have nothing to worry about, transfer the risk. Get insurance with the right coverage. Forbes.com estimates that the cyber insurance market will grow from US\$ 2.5 billion in 2015 to US\$ 7.5 billion in 2020. So the insurance companies have seen the opportunities spawned by this pervasive threat. It is important to make sure that any damages arising from an attack on your system are covered. Note that a breach on your end can lead to breaches of your suppliers and customers. They will sue for damages! The Equifax breach resulted in the personal data of over 140 million US citizens being made public. The US retail giant Target was breached via

its maintenance service provider. Maersk's breach affected the worldwide shipping community. All these resulted in damages that must be paid from non-budgeted resources. Insurance is the most logical strategy that will reduce your financial risk.

In summary, there is an exponential growth in connectivity. The use of online services is trending upwards, making the threat surface larger and more complex. Traditional cybersecurity measures are always playing catch-up, necessitating a strategic convergence approach to physical security and cybersecurity. Enterprise architecture must be redesigned to include a focus on cybersecurity awareness. No one is immune; all should be trained and sensitized; individual vigilance may win only half the battle. However, you may have done all that is possible and still experience a breach. So, insure against the risks with the right coverage.

**Even if you believe that your data is insignificant, and you have nothing to worry about, transfer the risk. Get insurance with the right coverage**



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