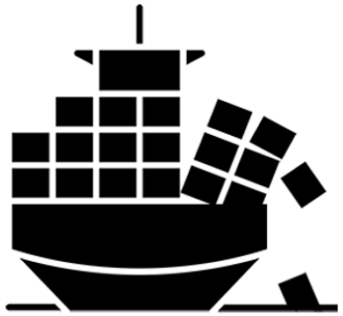
Marine Insurance Issues Seminar 2021

Unmasking Marine Insurance

The 2020 Crisis of Containers Lost at Sea



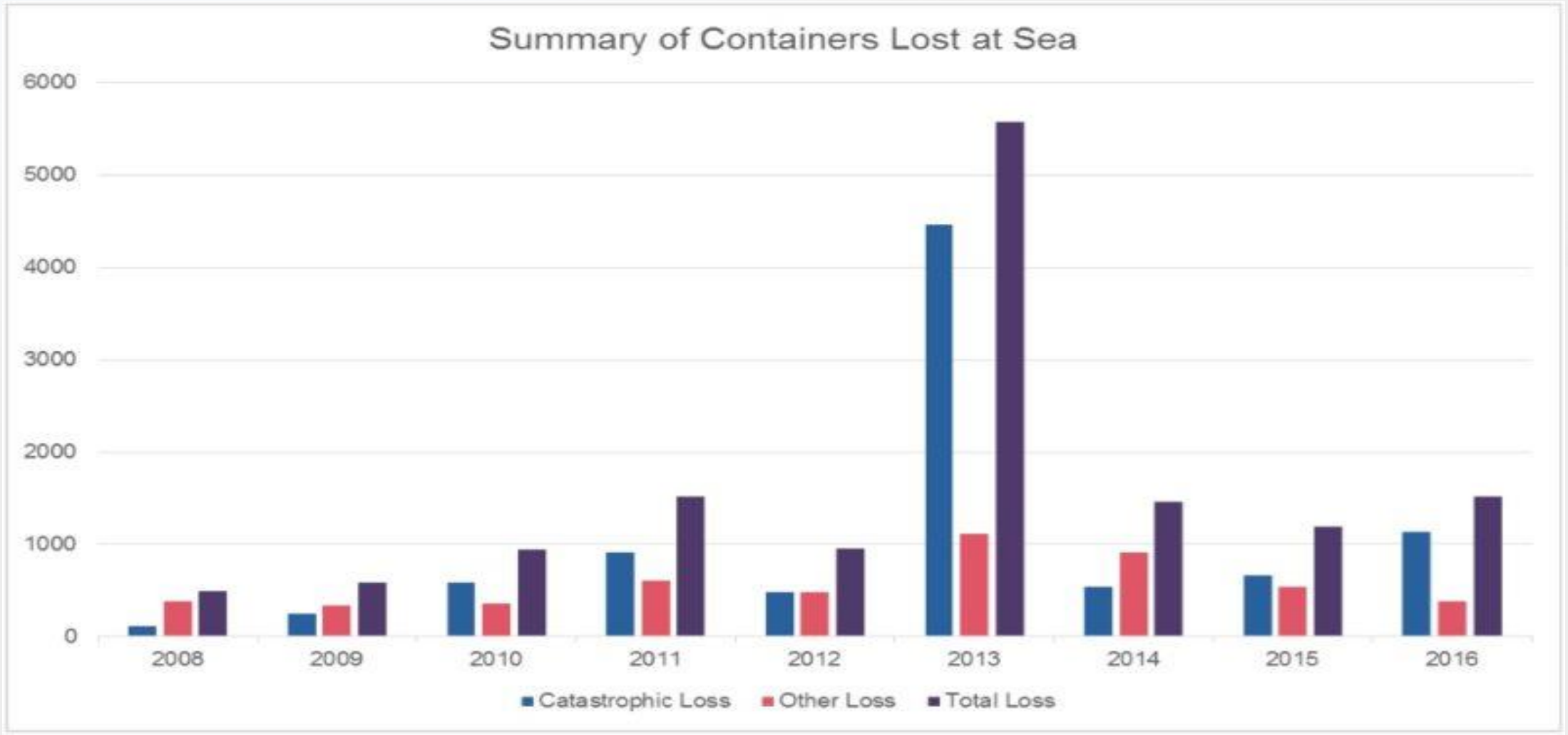
Why ? … and Who is Responsible..??

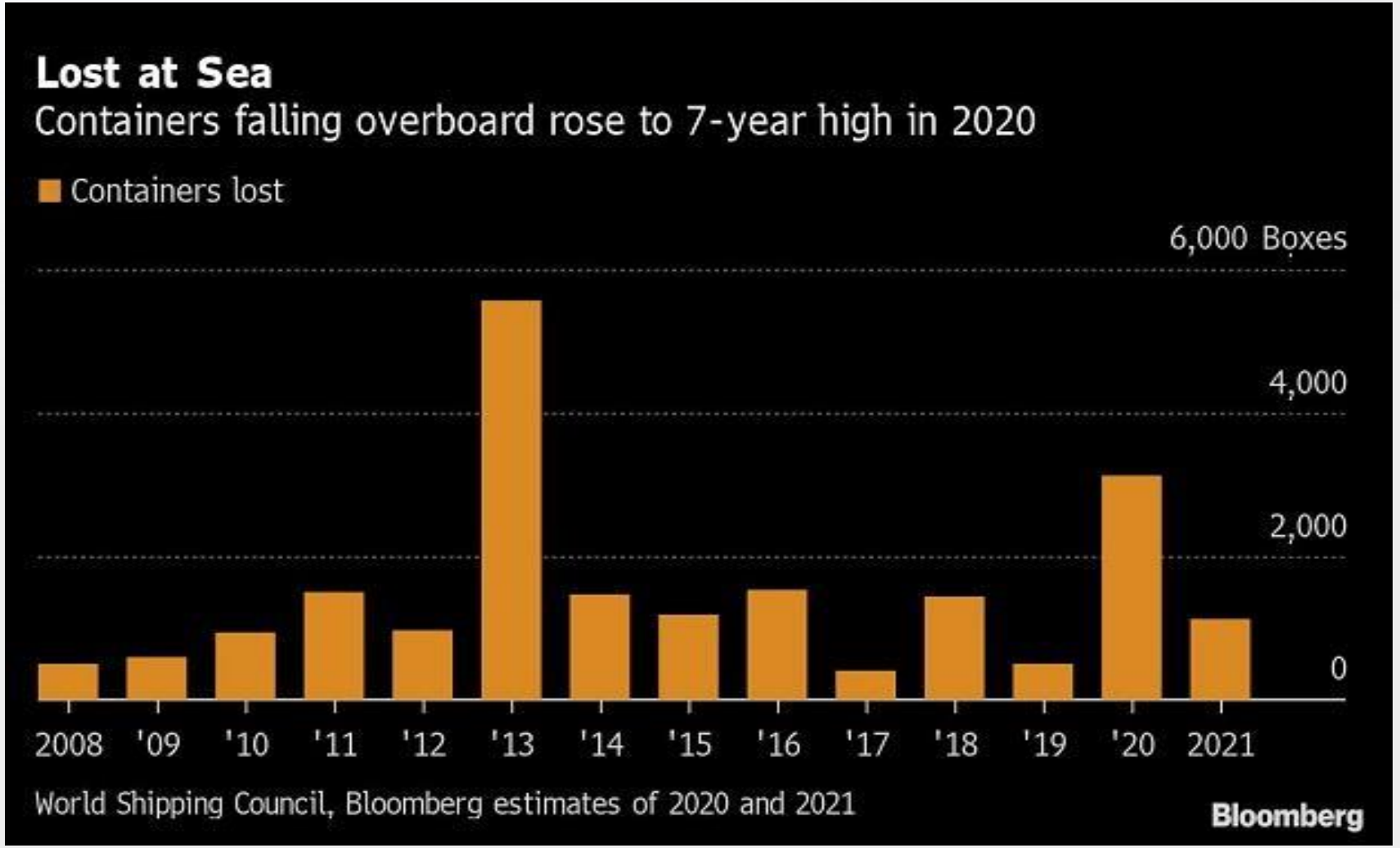
By
Capt. Ivo Knobloch - MM
VP Hull & Machinery – Marine Casualty Division

Prepared for
AIMU – Marine Issues Committee
May 13, 2021

Containers falling off Ships while at Sea

Why ? … and Who is Responsible..??


Summary of Containers Lost at Sea
6000
5000
4000
3000
2000
1000
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
Catastrophic Loss
Other Loss
Total Loss


Lost at Sea
Containers falling overboard rose to 7-year high in 2020
Containers lost
6,000 Boxes
4,000
2,000
0
2008
'09
'10
'11
'12
'13
'14
'15
'16
'17
'18
'19
'20
2021
World Shipping Council, Bloomberg estimates of 2020 and 2021
Bloomberg

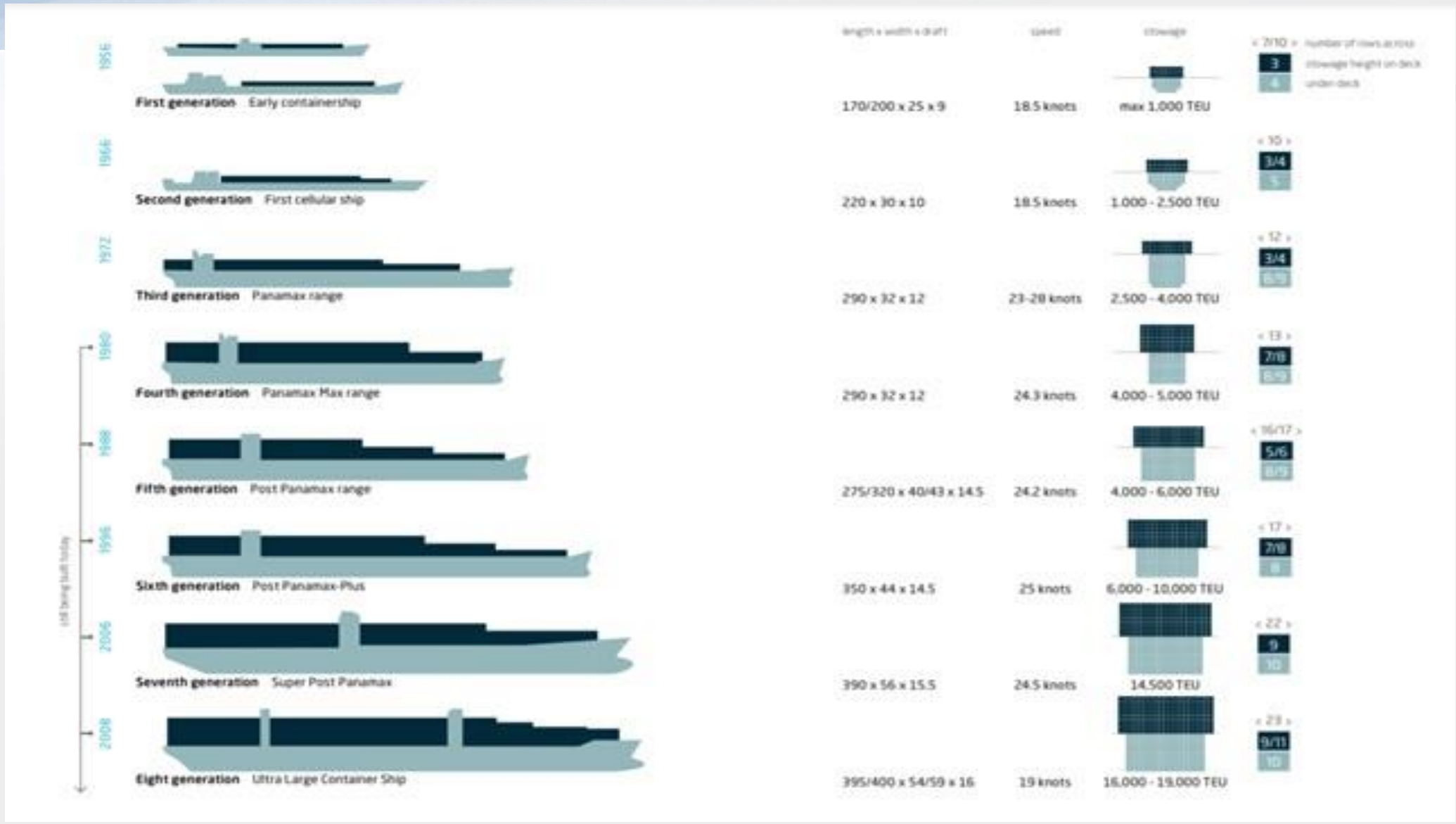
The Swedish Club
2020 Loss Prevention Report

After analyzing "*230 claims filed between 2015 and 2019 with at least $5,000 in value*, found that "*the average container vessel cargo claim was $52,000 over the past five years*".

Further, while "*the most frequent types of claims were for wet or temperature damage* the report shows *that containers lost overboard, while accounting as cause for only four percent of all claims, they in fact represented over 10 percent of the costs*" … i.e. bringing the average container overboard value to about **$**133,000

Contaminated Coast Lines from Cargo carried in Lost Overboard Containers

Containership Generations



The Trans-Pacific Route

North Pacific, great circle navigation. High following seas for ships sailing in easterly direction

Mutual Marine Club's & Class Findings:
(DNV/GL – Swedish Club – Gard AS)

Gard: "… *following extensive research on this subject, it has been recognized that containerships are sensitive to certain ship motions and hydrodynamic effects, such as:*

- ***Excessive Rolling**, i.e.* ***beyond the design criteria***
- ***Slamming** (bow and stern)*
- ***Hydro Elastic Effects** (springing and whipping)"*

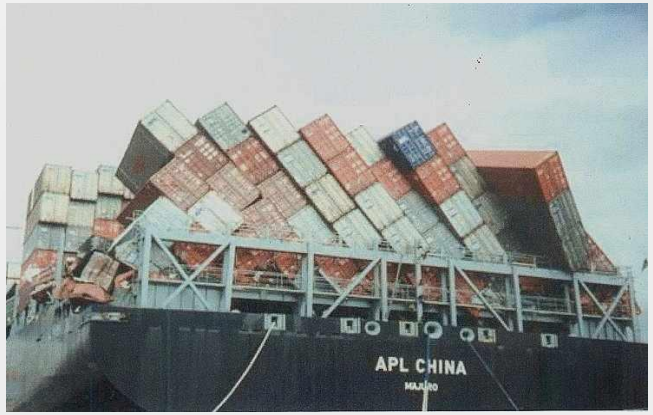
What is Excessive / Parametric Rolling ?

Parametric Rolling describes a large rolling motion of a sudden violent nature due to loss of stability during the passage of a wave followed by an equally sudden violent recovery of stability as a result of a combination of wave length, vessel speed, course and vessel design.

Post Panamax Class Containerships with large bow flares are particular prone to parametric rolling.

In **2007** this phenomenon forced the **IMO to issue their Circular 1228**, providing Masters with operational guidance how to avoid such dangerous situations.

The Results of Slamming



Recent Marine News Headlines Covering Container Overboard Losses:

Seatrade Maritime News - December 07, 2020

"Is vessel size a factor in collapsed container stacks?"

The Loadstar - January 21, 2021

"Carriers Face Pressure for Load Restrictions after latest Container Loss in Pacific"

Journal of Ocean Engineering and Technology:

"*… due to the risks associated with dynamic stability on container vessels, including parametric rolling, NEW containerships* ***were likely to feature reduced onboard cargo volumes in comparison to existing ships***.

Further the authors added, that there was "***a great possibility that existing ships will be forced to decrease their onboard cargo volume or operating speed***"

Bloomberg News February 17, 2021 Headline:

"*Cargo Boom Fuels 10-Billion-Spree for New Containerships*".

"*Since early October, orders for new container ships have increased by 115, with new container capacity of more than 1.1 million 20-foot equivalent units, or TEUs*."

- 1.1 Million TEU / 115 container ship orders ≤ **below 10,000 TEU** per ship
- **Are Carriers and Shipyards going back to the 6th Generation Class?**

gCaptain Online Journal April 05, 2021:

China State Shipbuilding Discloses $1.5 Billion Newbuild Order for 13 Big Containerships.

Carrier's decision as to the ordered ship size:

…"Each ship will measure 366-meters long and 51-meters wide"…

The "***Panama Canal*** *is able to handle* ***vessels*** *with overall* ***length*** *of* ***366 m*** *(1201 feet), 49 meters beam (increased by the* ***Canal*** *Authority effective 1 June 2018 to* ***51.25 meters****".*

The LoadStar – April 22, 2021

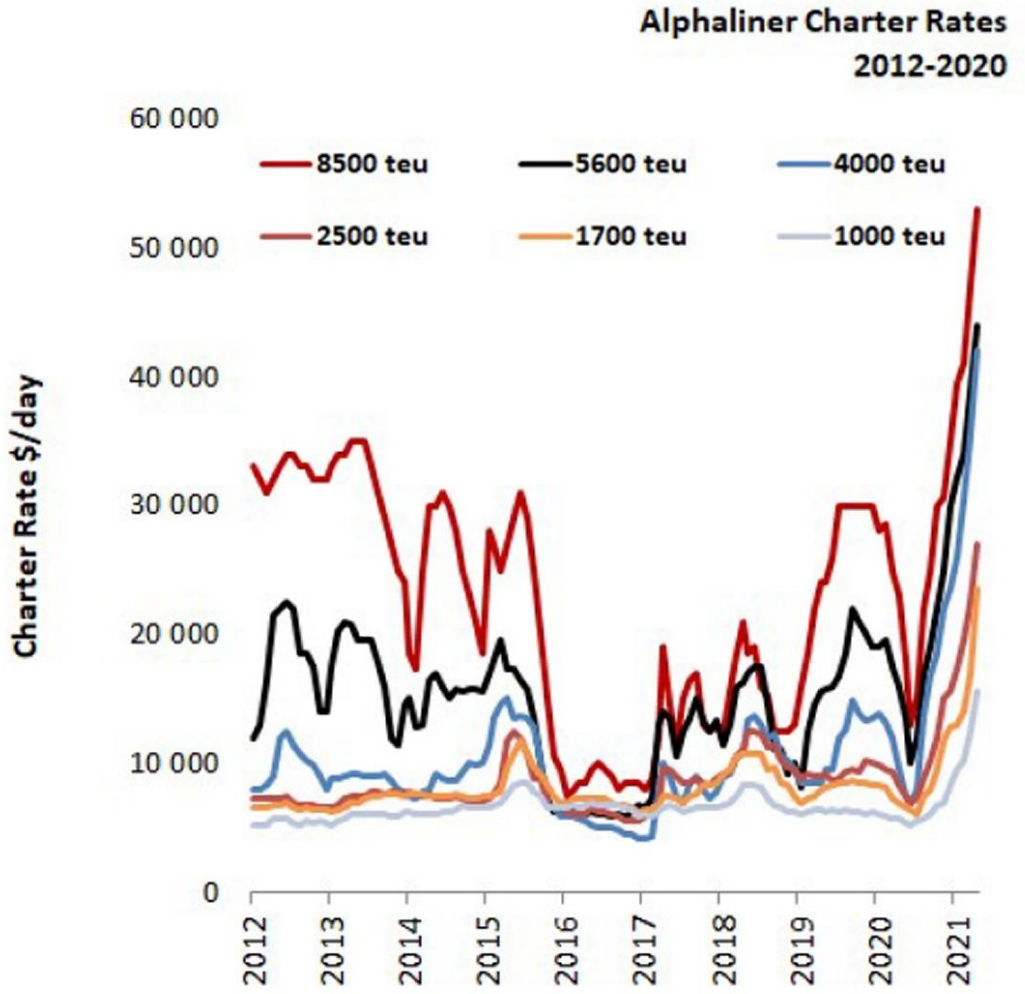
"**Containerships wanted: *Carriers `Scraping the Barrel' for tonnage***"

- *"… carriers keen to use **all** **available tonnage** for revenue-generating services, or for the evil necessity of empty box repositioning"*
- "***We would normally want to send out one of our guys to inspect the ship and talk to the master, but that has all gone out of the window*** *as, if we don't commit immediately, another carrier will take it off our toes."*

- And lastly …

"***We are even chartering ships we have had problems with in the past …***,

$$$$ The TEU Tonnage Gold Rush Atmosphere $$$$



Daily Charter Rates by TEU Size	06 Apr $/day	20 Apr $/day
8,500 teu	47,000	53,000
5,600 teu	40,000	44,000
4,000 teu (Panamax)	38,000	42,000
2,500 teu	25,000	27,000
1,700 teu	19,000	23,500
1,000 teu	14,000	15,500

*rates for twelve-month charters

Questions