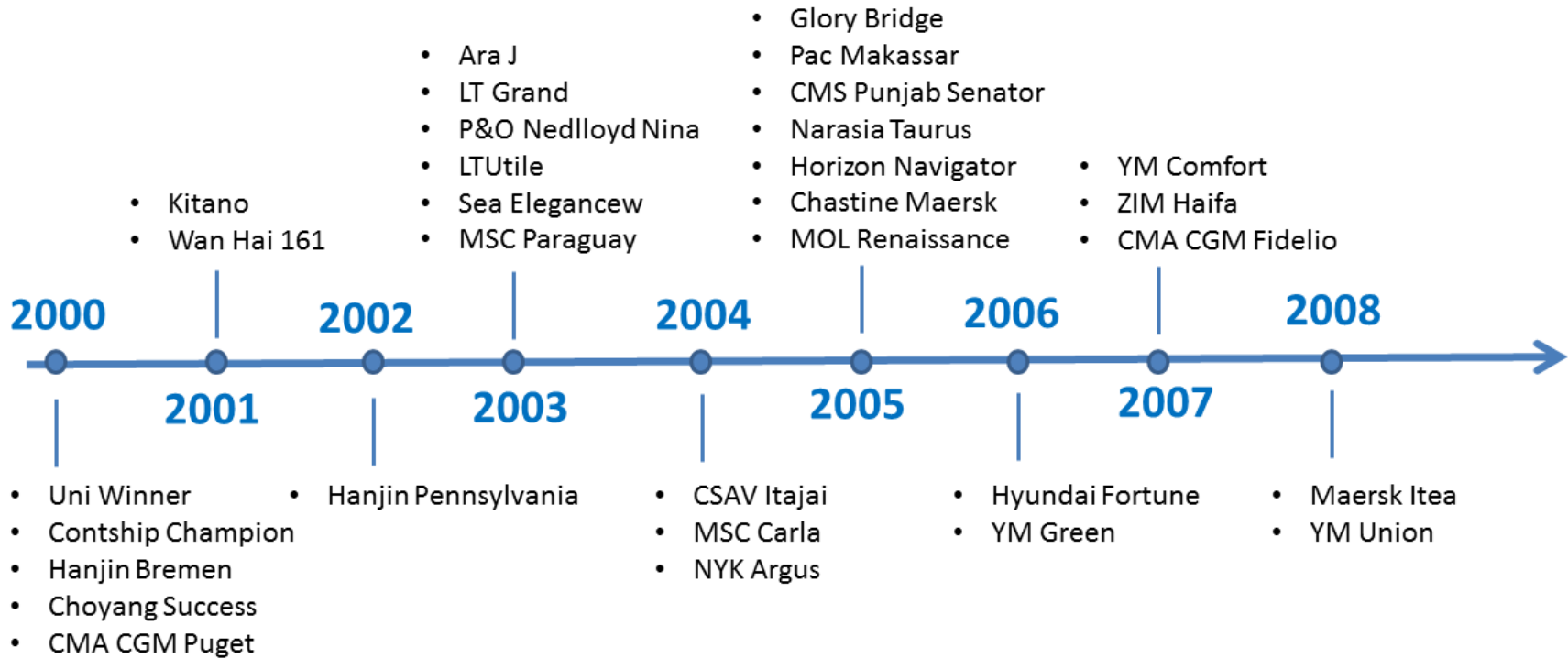


Firefighting System on Container Vessels

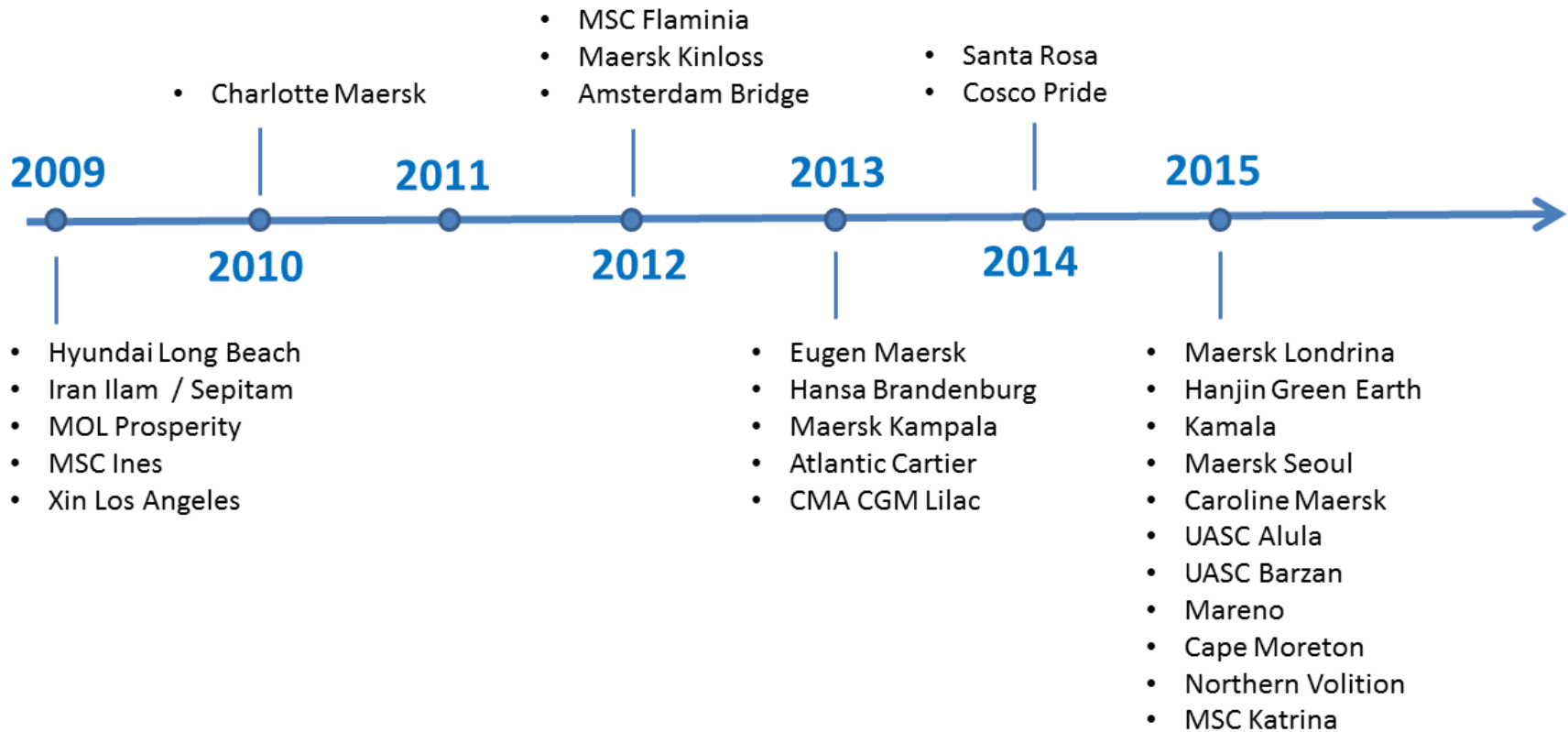
International Marine Claims Conference IMCC 2019

Uwe-Peter Schieder (Master Mariner)
Vice Chair IUMI LPC

Container ship fire time line



Container ship fire time line



Container ship fire time line



- Cargo fires
- Development of firefighting systems
- Analogy with fires in buildings
- Examples
- Firefighting options today
- Firefighting options tomorrow
- Conclusion

The website states:

"Shipment of Calcium Hypochlorite (Sodium process):
In China, no shipping company accepts Calcium Hypochlorite in dry container, because they believe this is dangerous chemicals for dry container.

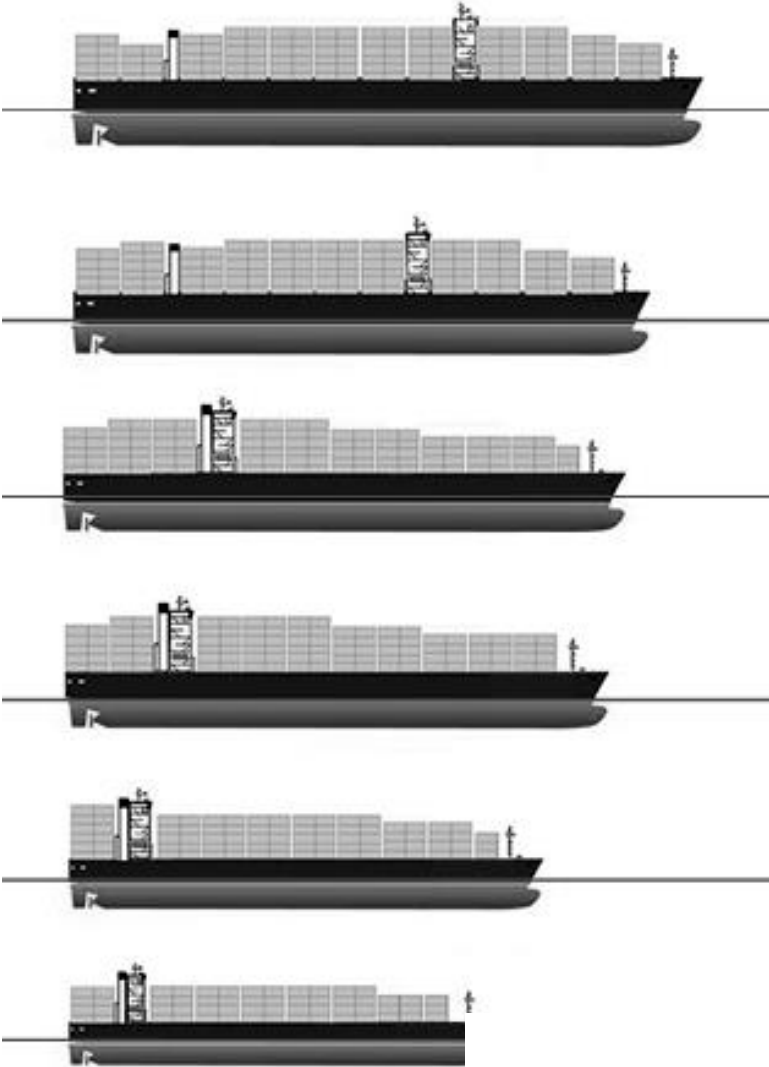
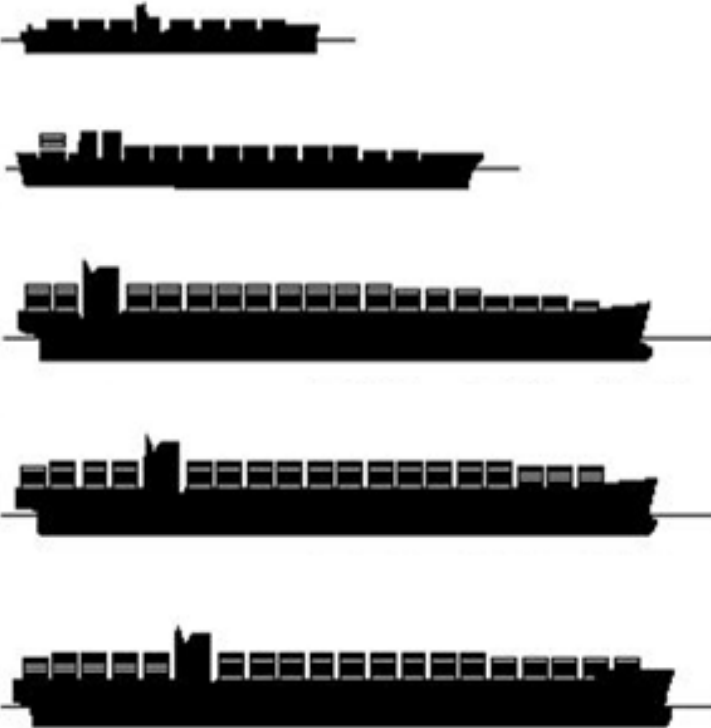
For the above reason, to ship it in dry container,

we must cover the name on the B/L,

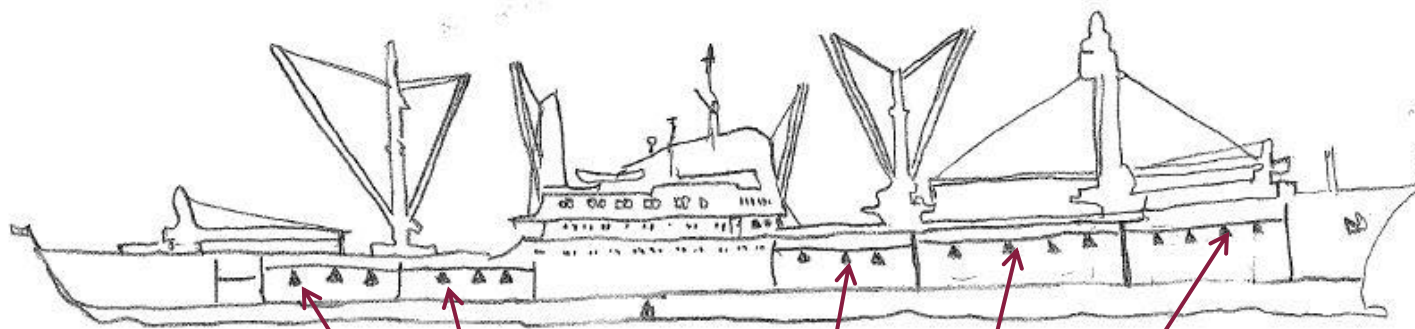
we show other name like:

calcium hydroxide, calcium chloride, etc. on the B/L."





Development of firefighting systems



CO2 system in every hatch



Privatparkplatz
des CR Bismarck
Wahlberechtigte
Wahlberechtigter
Wahlberechtigter
Wahlberechtigter





Start of fire



After approx. 5 s



After approx. 20 s



After approx. 40 s



After approx. 60 s



Sprinkler nozzle opens



After 70 s



After approx. 80 s



After approx. 90 s



After approx. 100 s

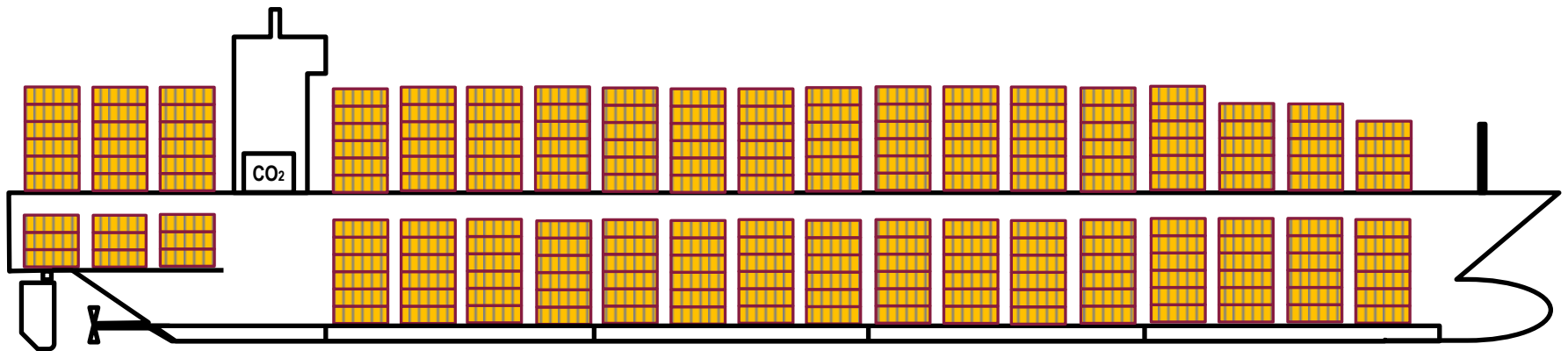


After approx. 110 s

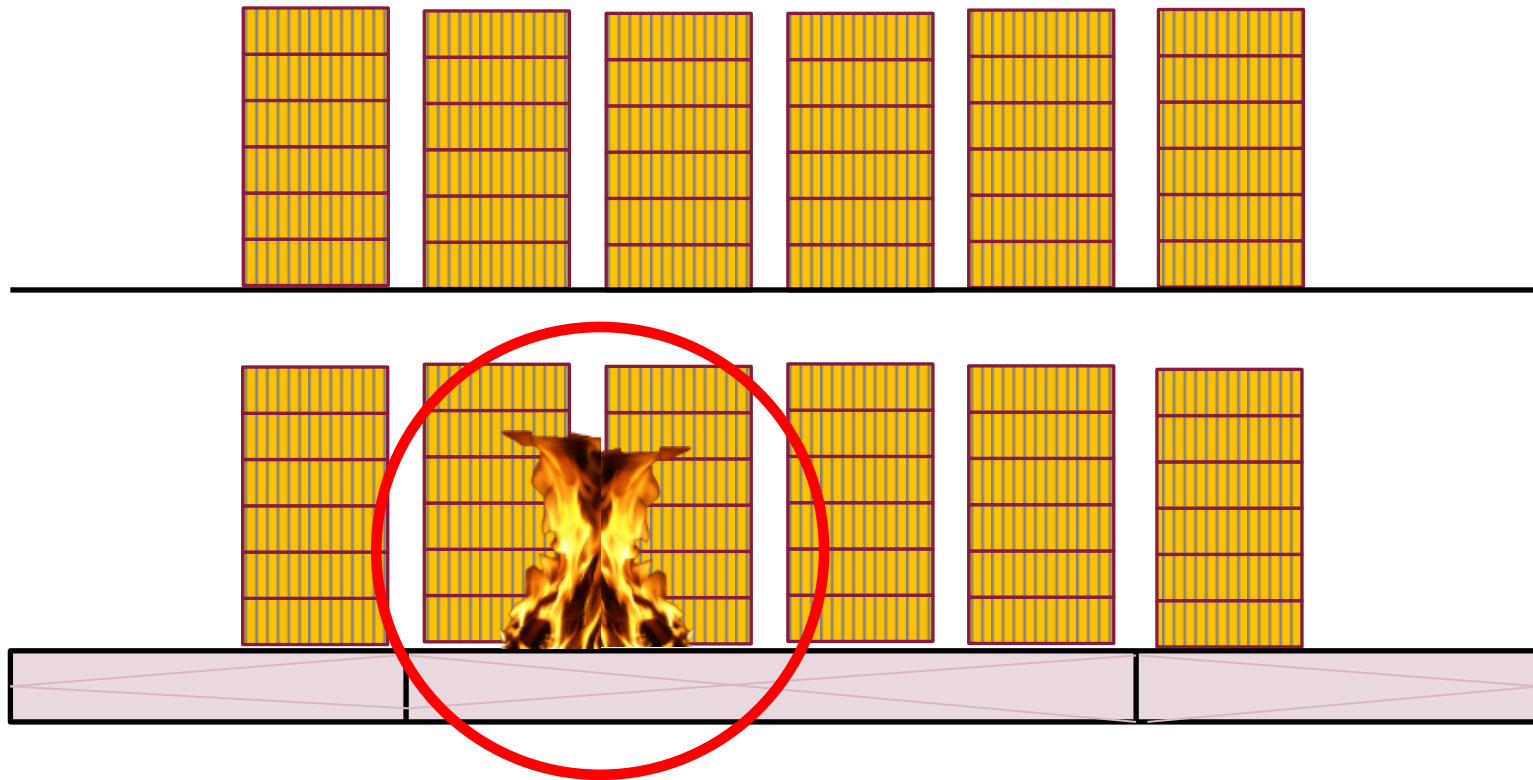


Extinguishing the last of the fire

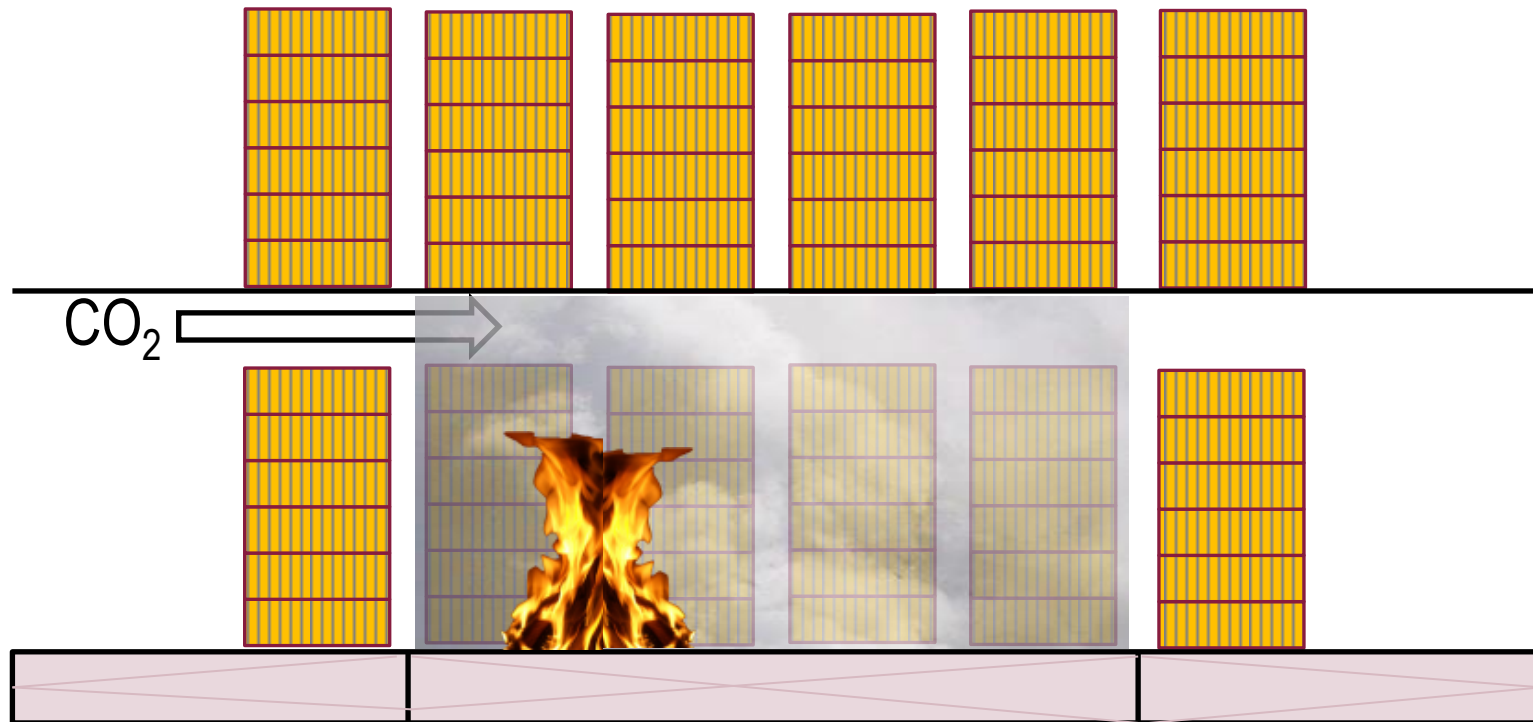
Firefighting options today



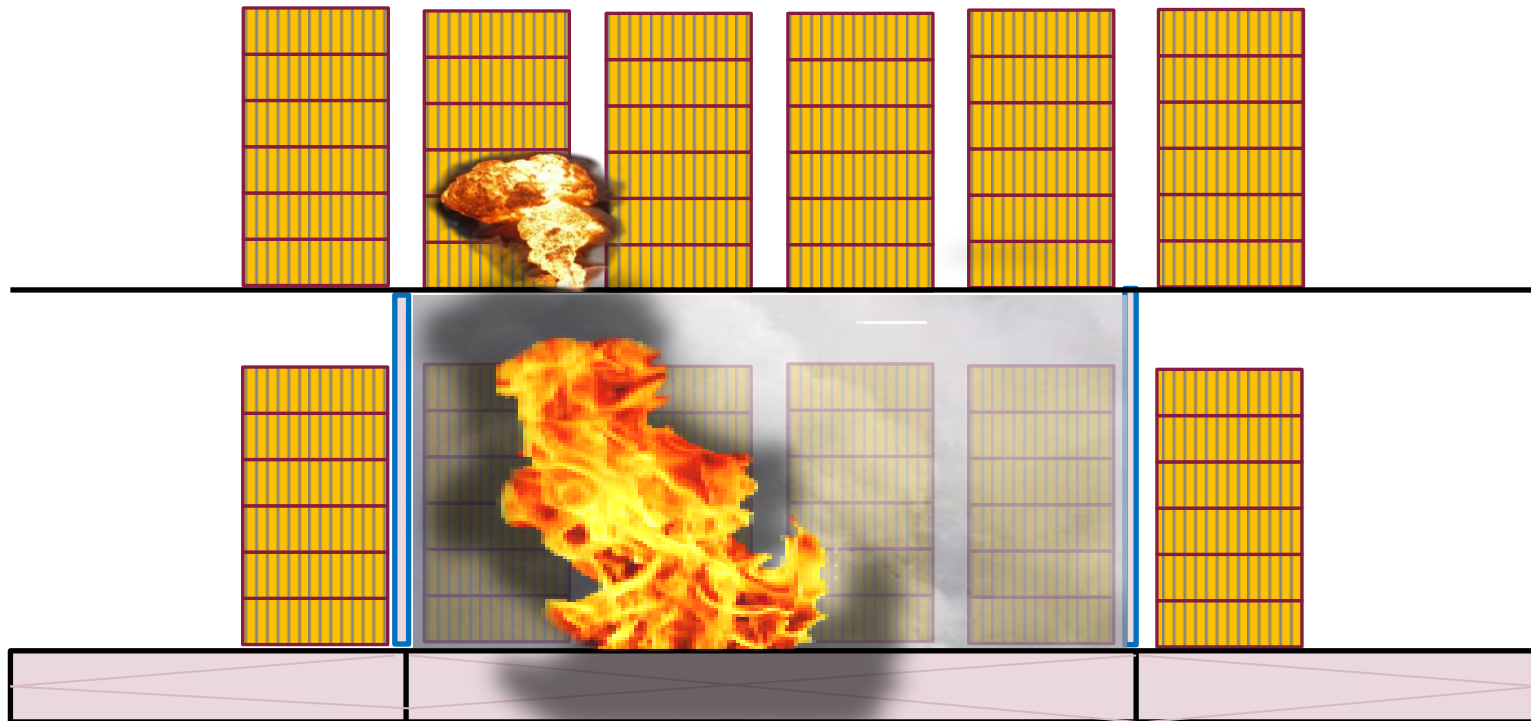
A fire breaks out and is detected



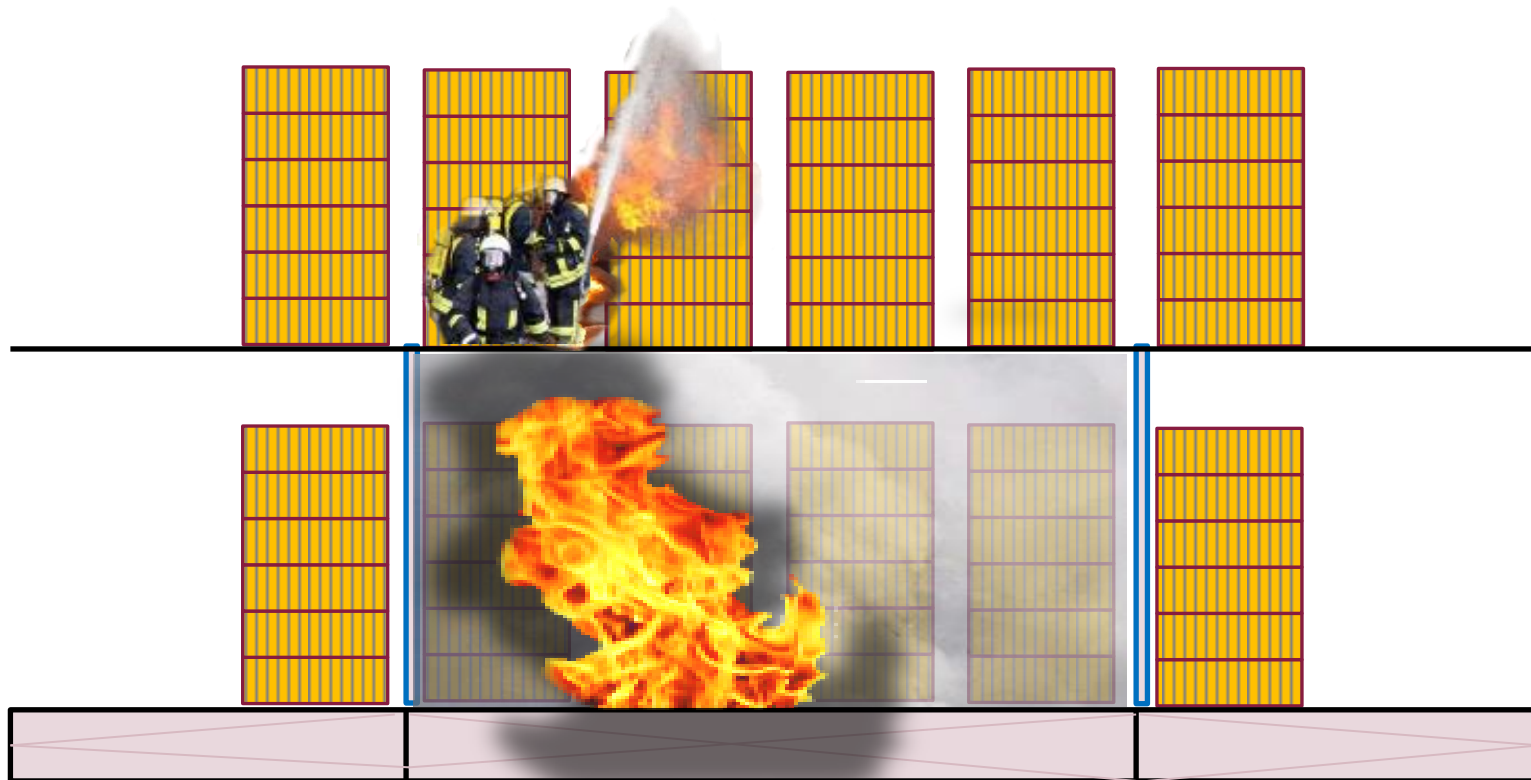
The hold is flooded with CO₂



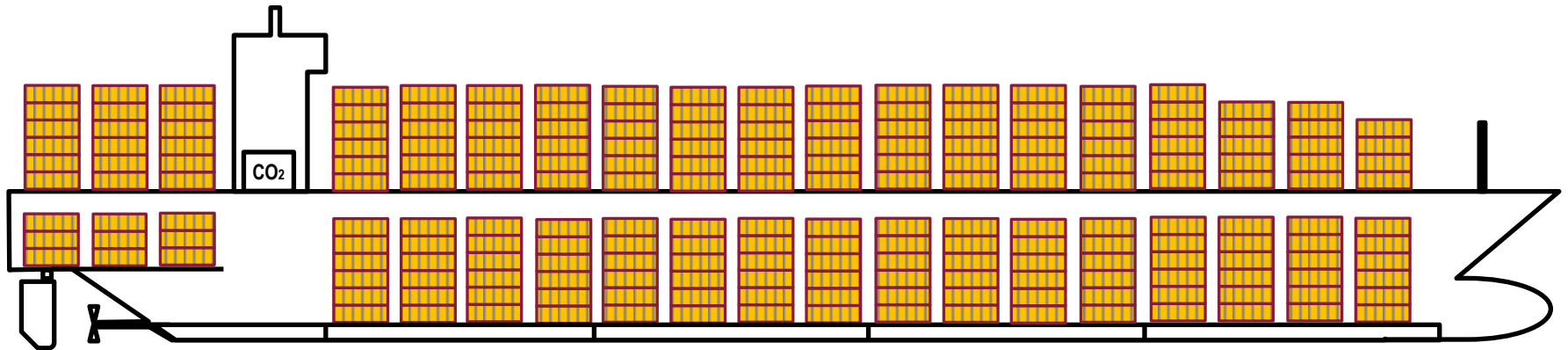
Fire spreads to the deck



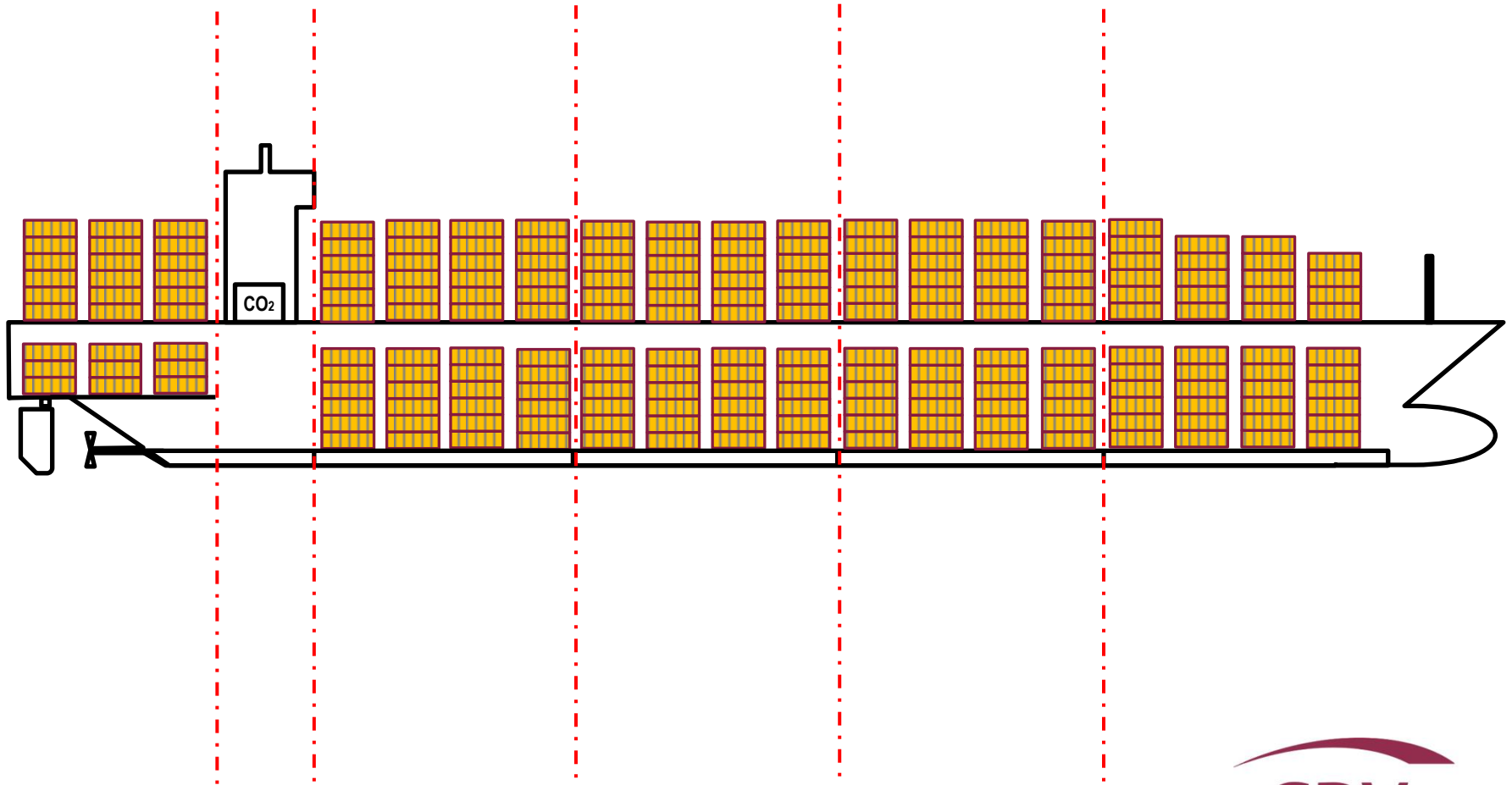
The crew combats the fire by hand



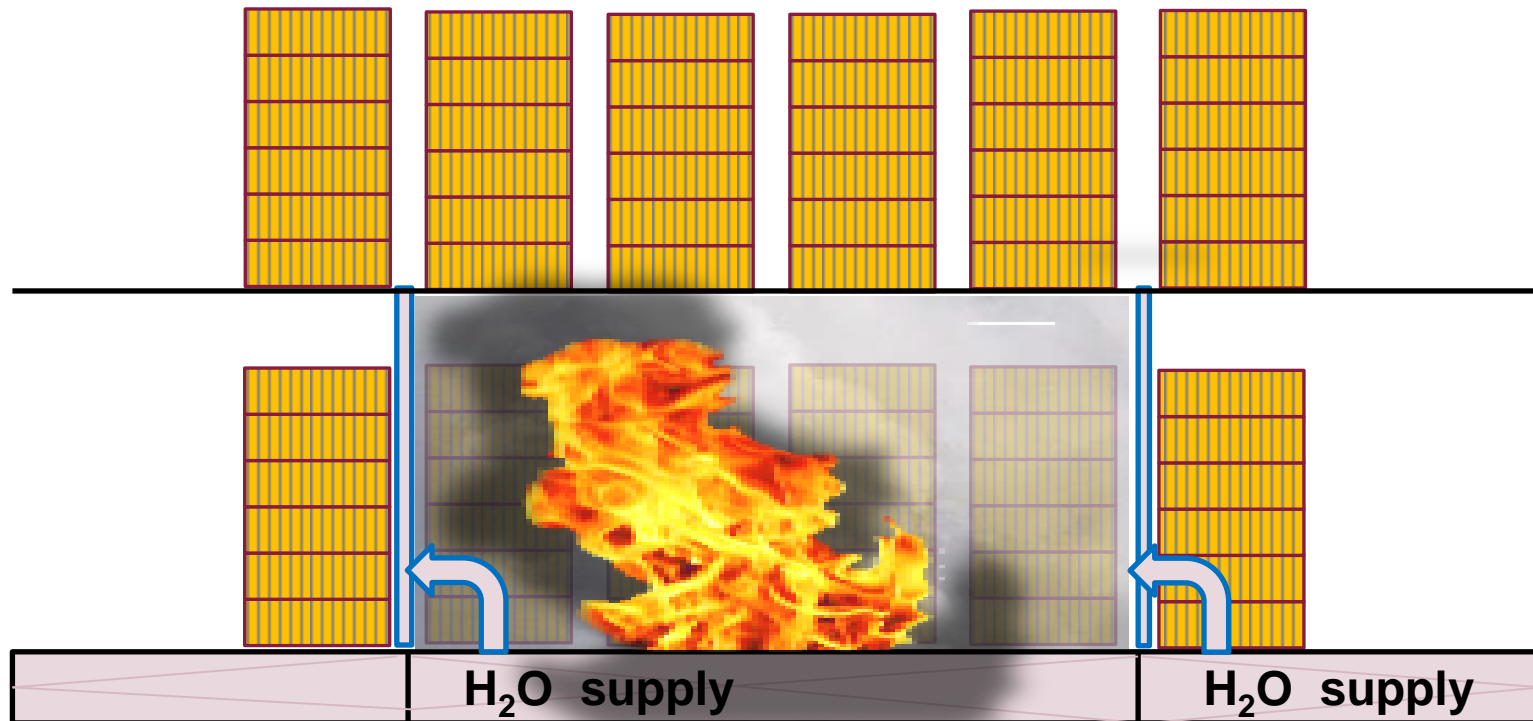
Tomorrow's options for combating fires



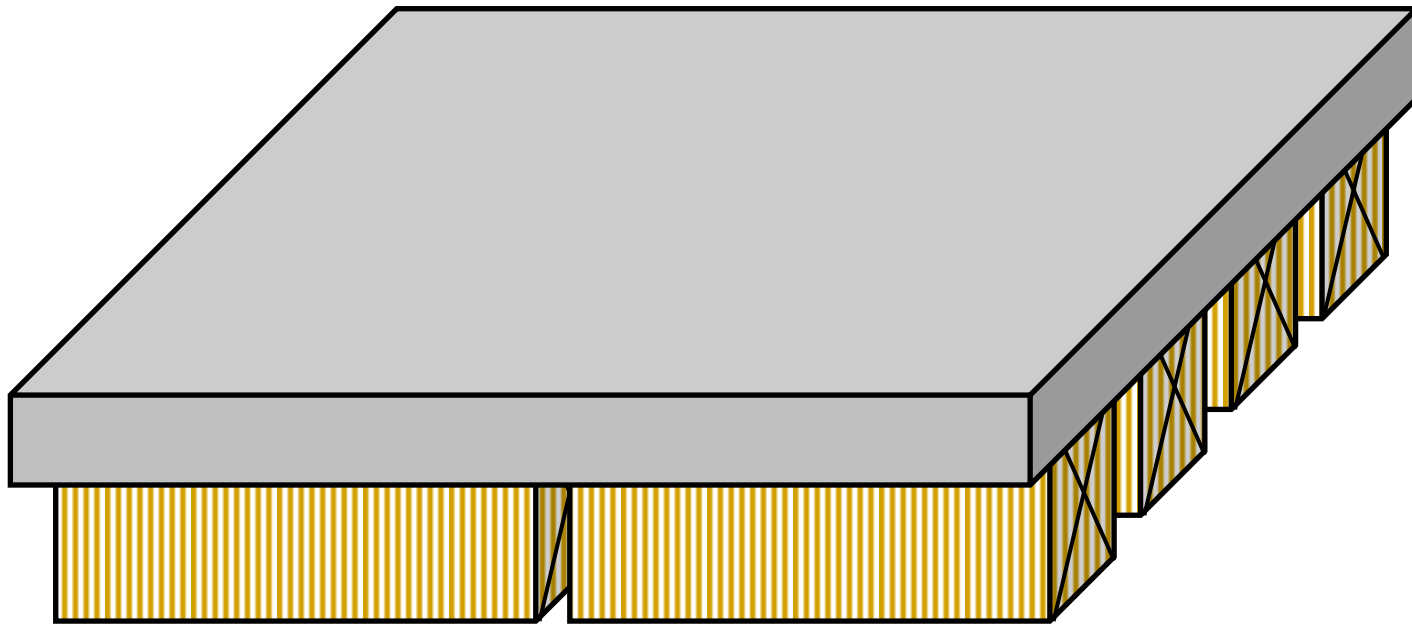
Partitioning into fire compartments of 2000 to 3000 TEU each



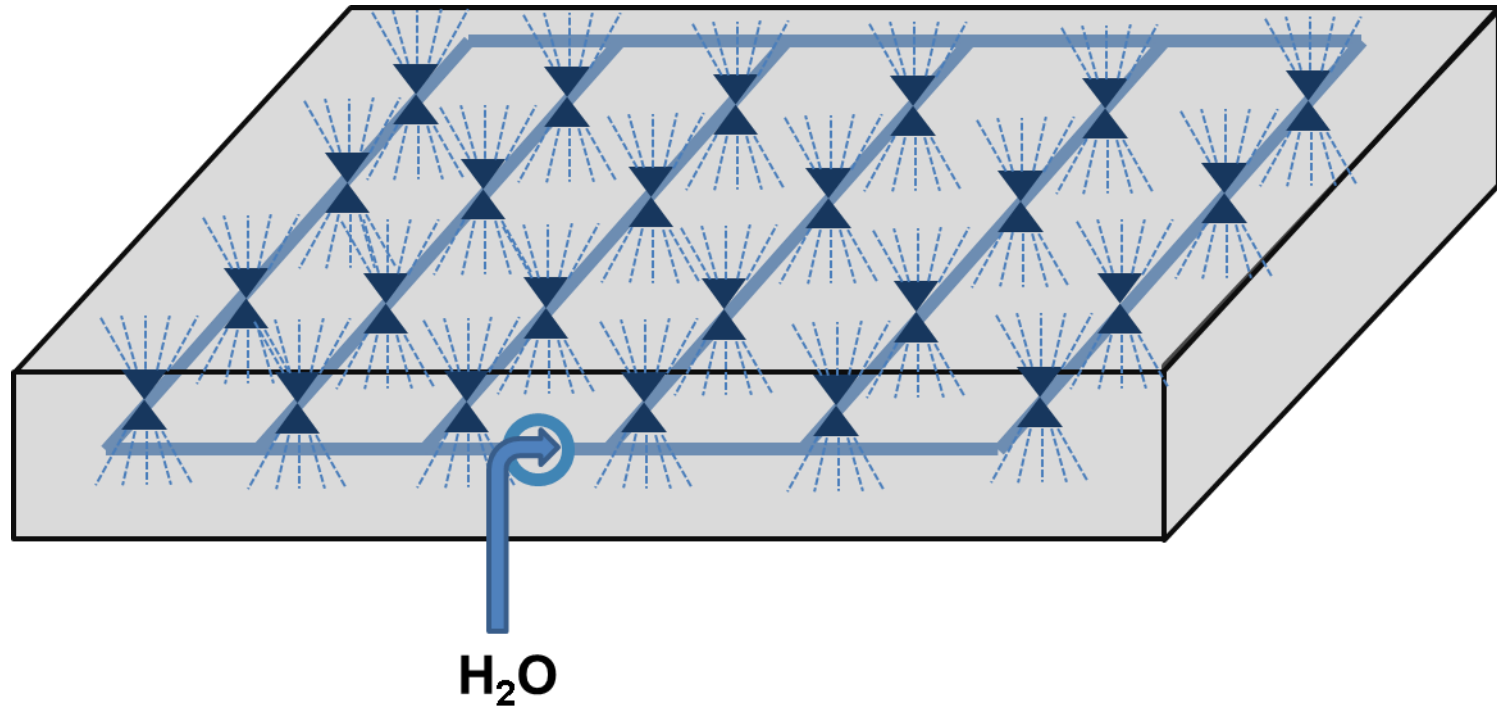
The cofferdams are cooled with water



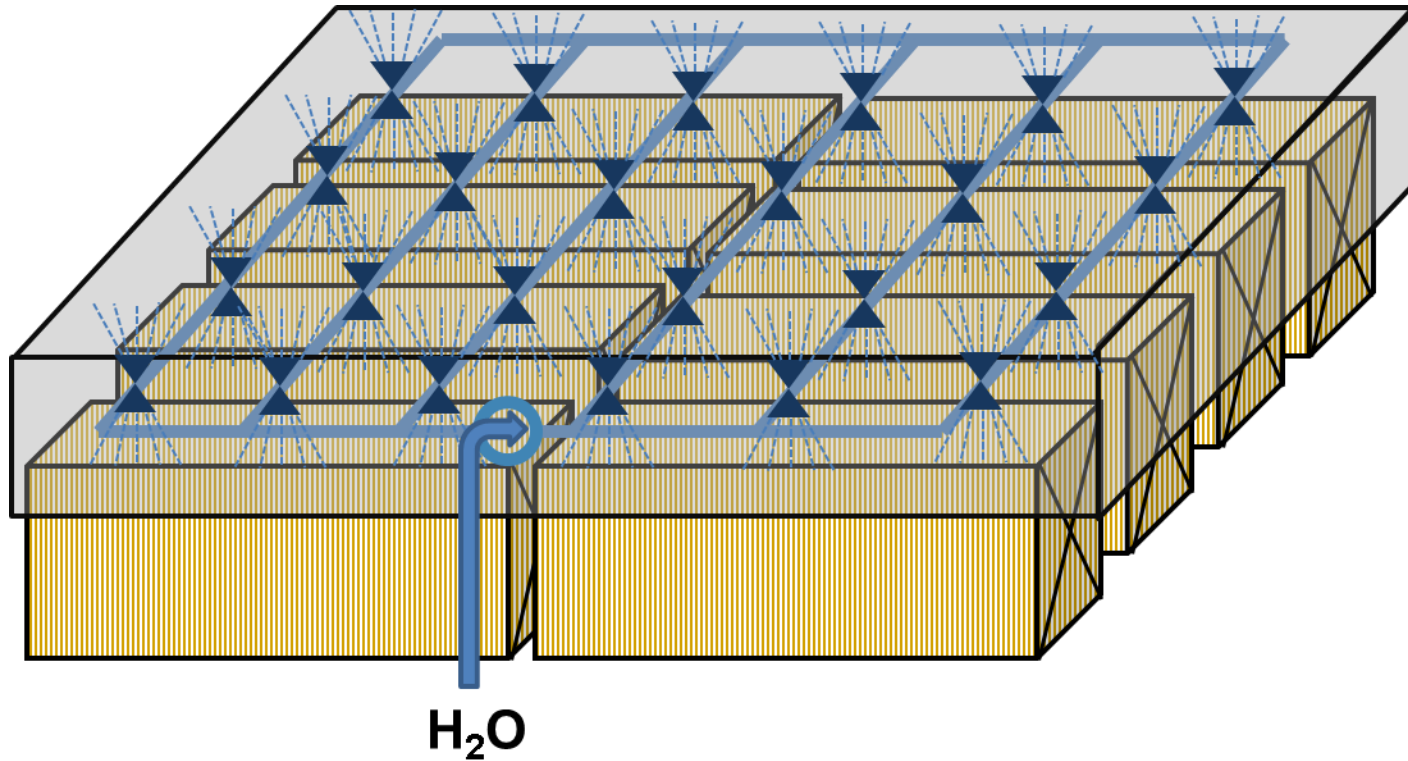
Hatch cover stability



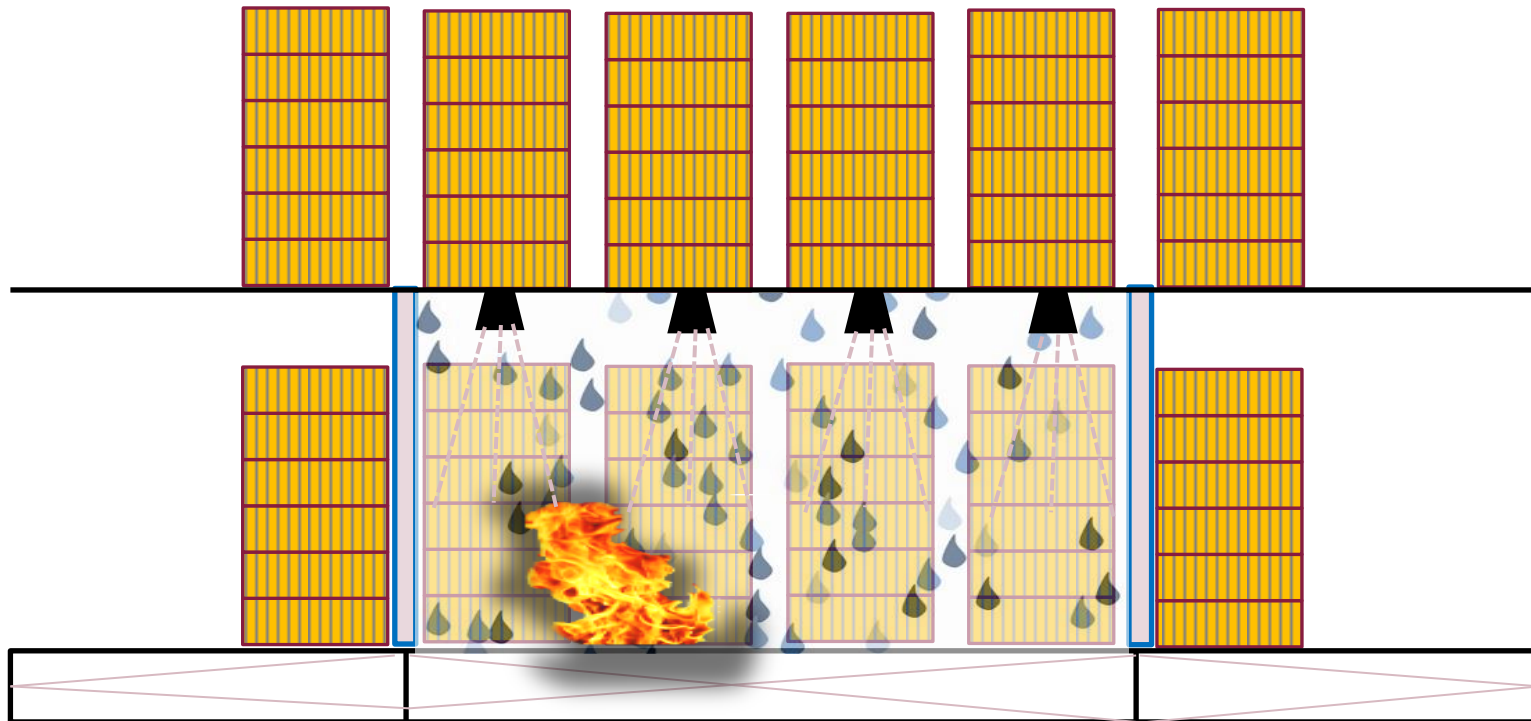
Cooling the hatch cover



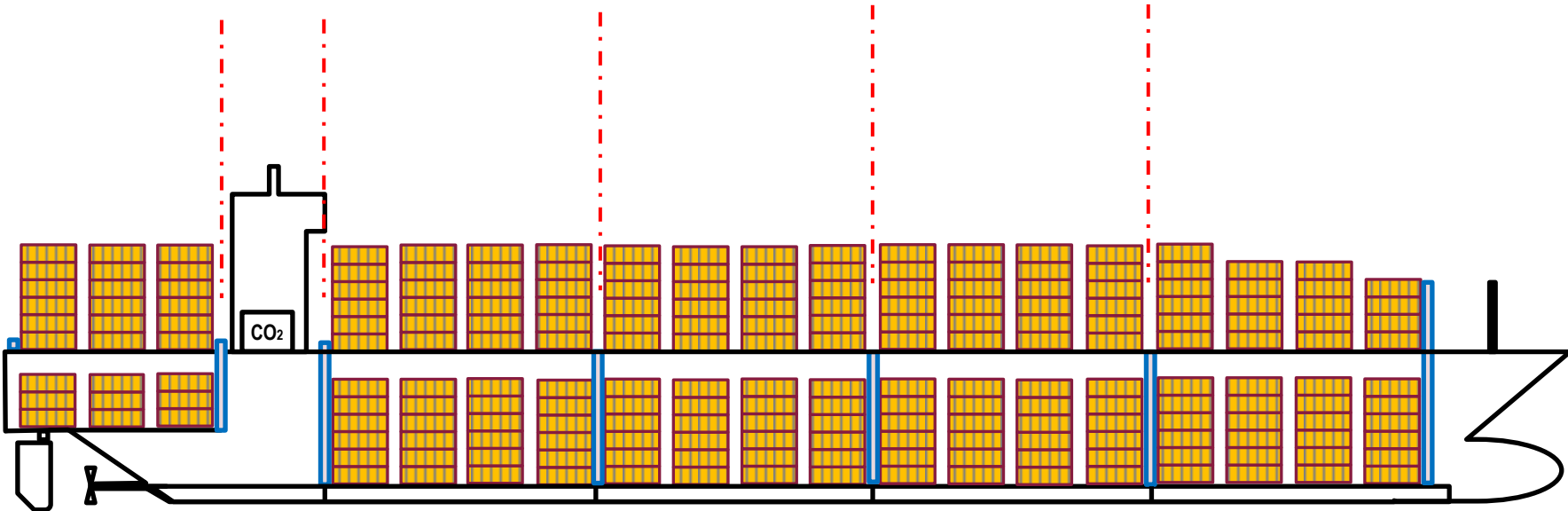
Cooling the cargo and the cover



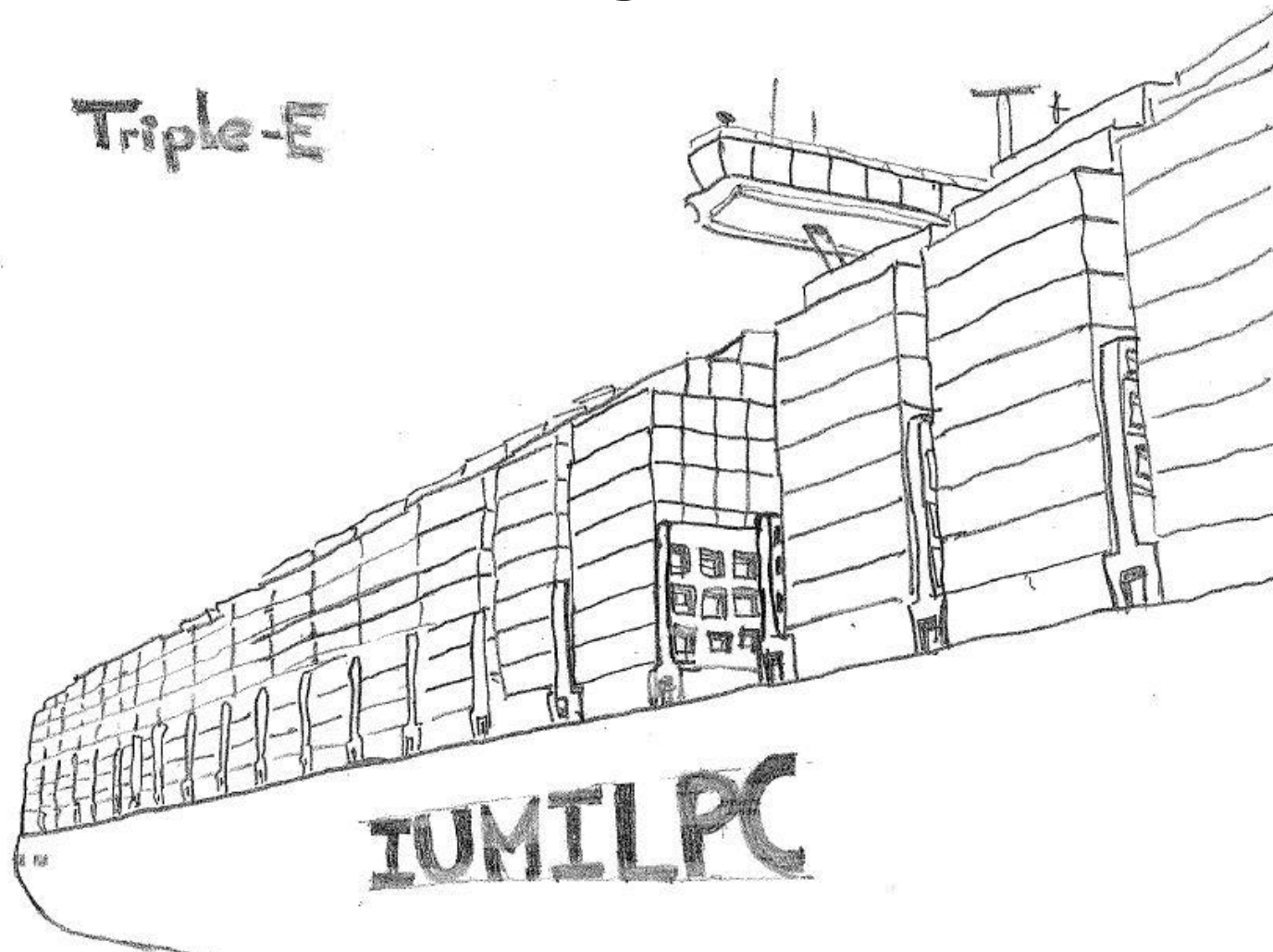
The water that is used enhances the effect of the CO₂



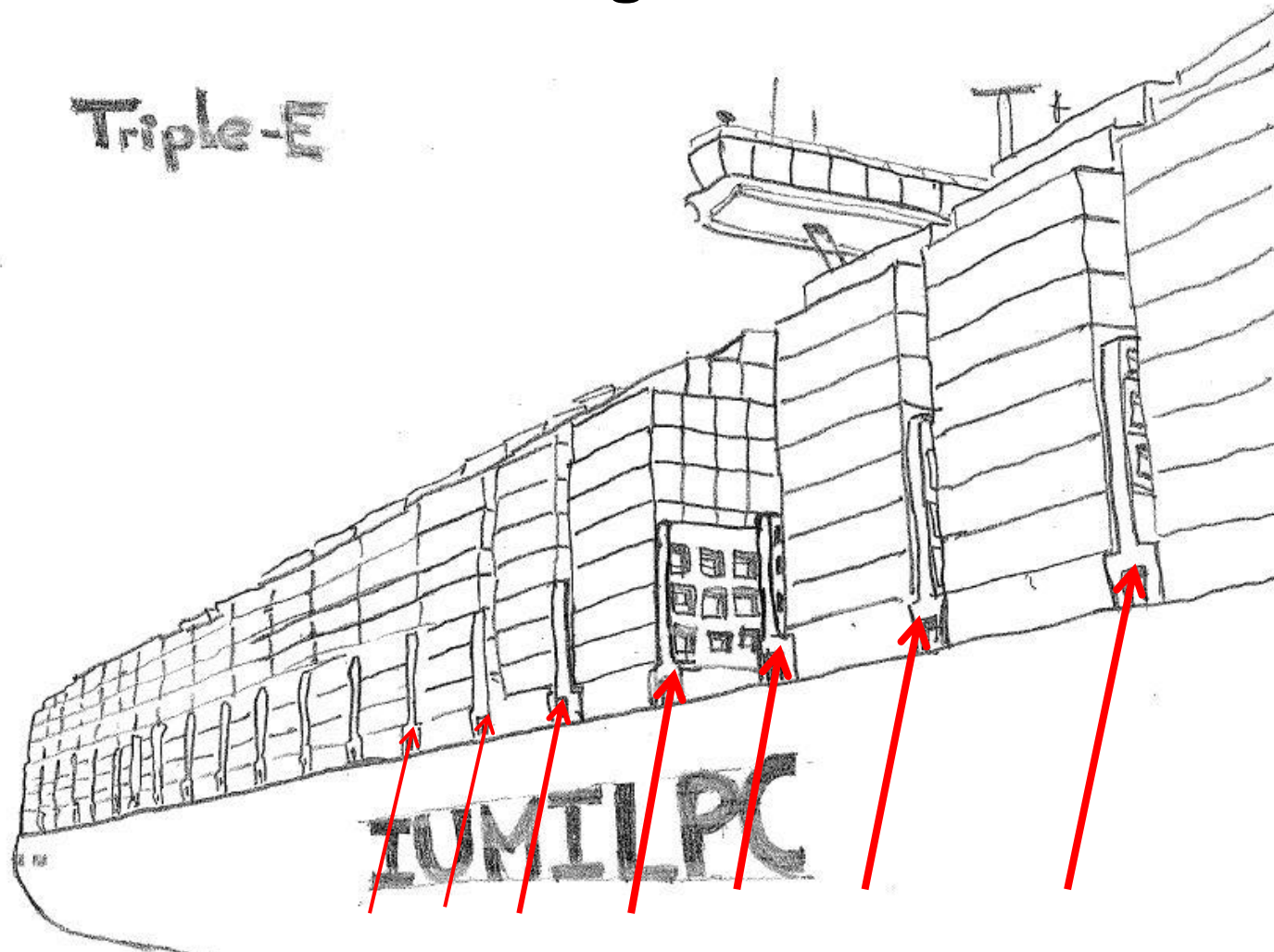
Partitioning on deck



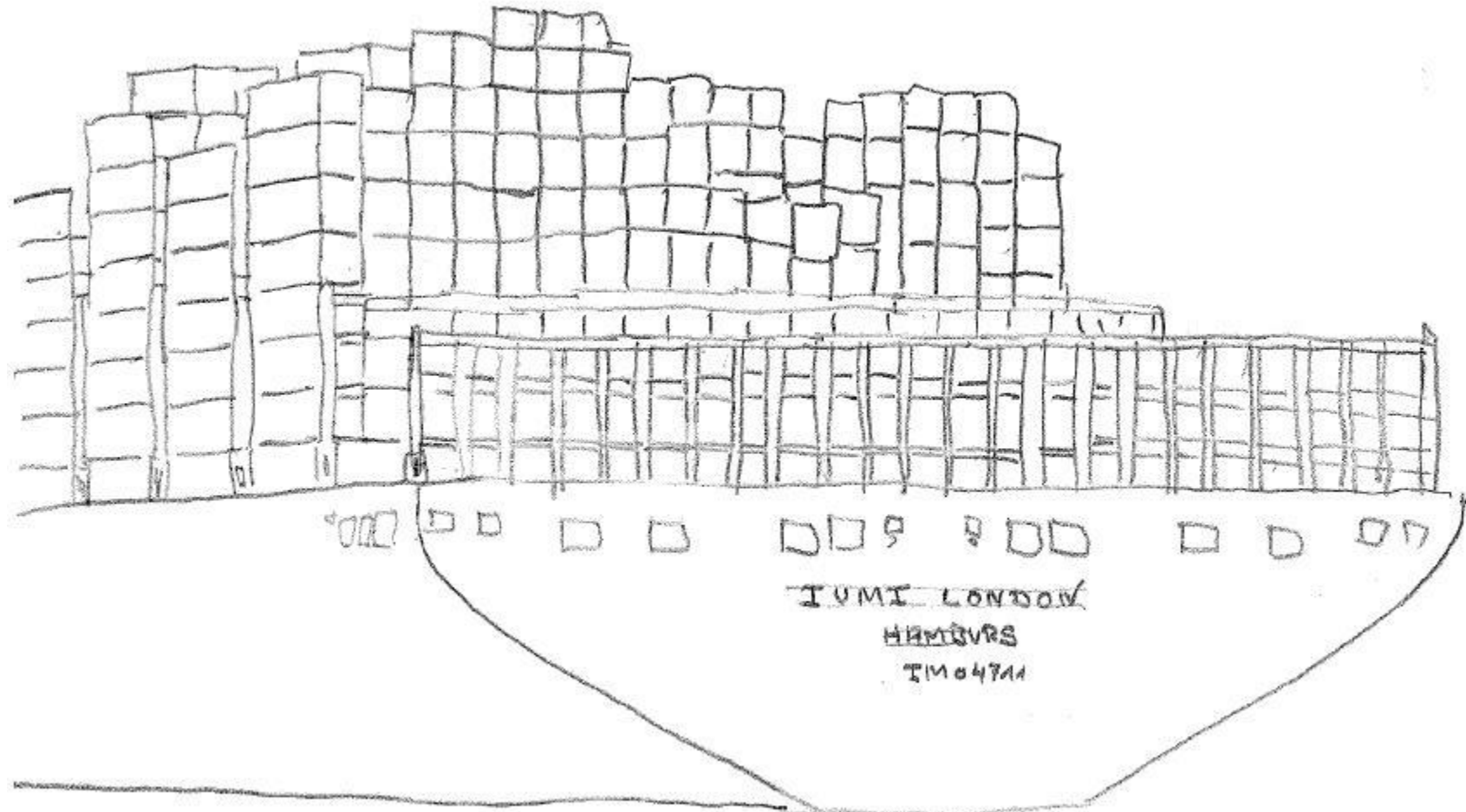
Tomorrow's options for combating fires



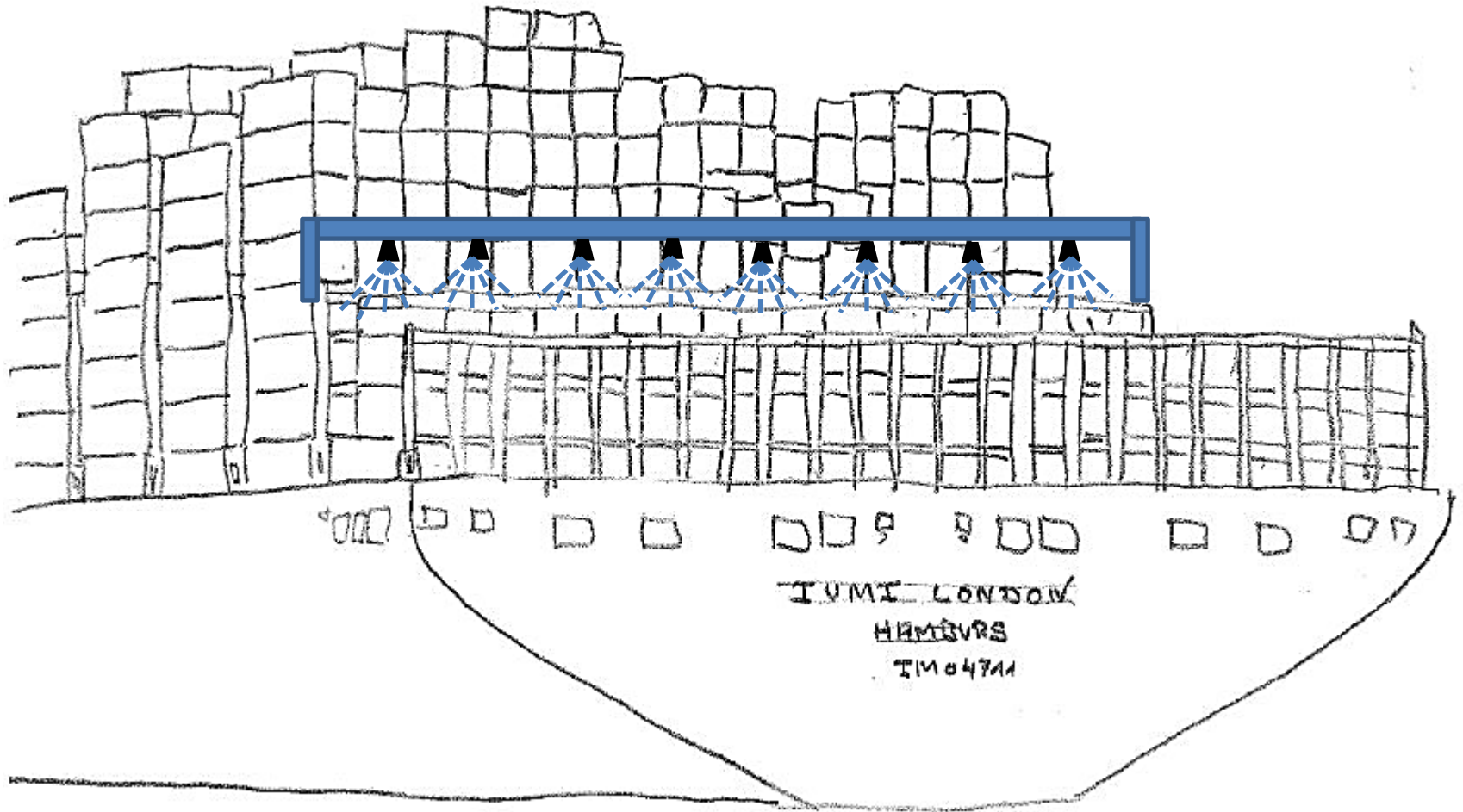
Tomorrow's options for combating fires



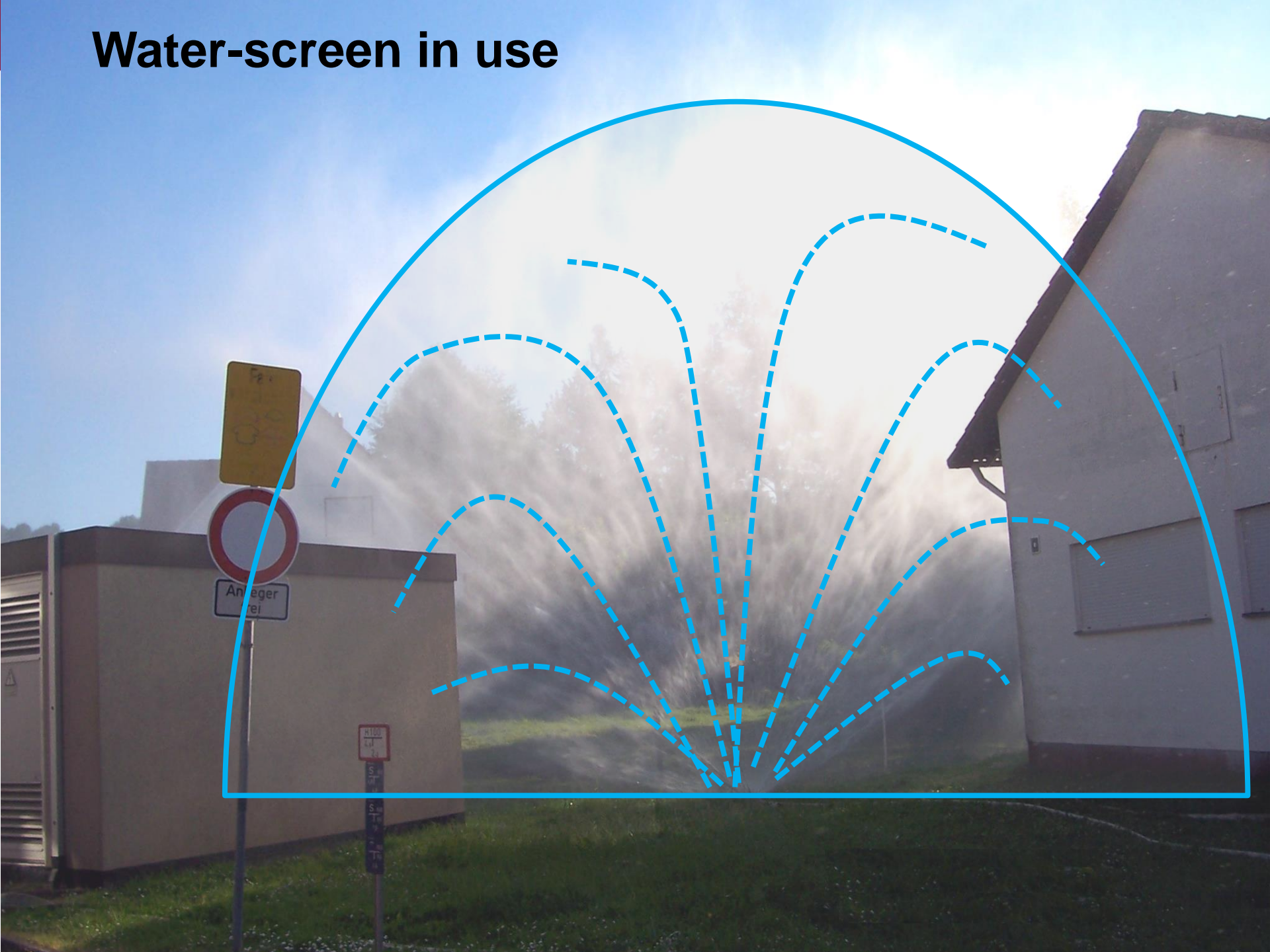
Aft lashing bridges



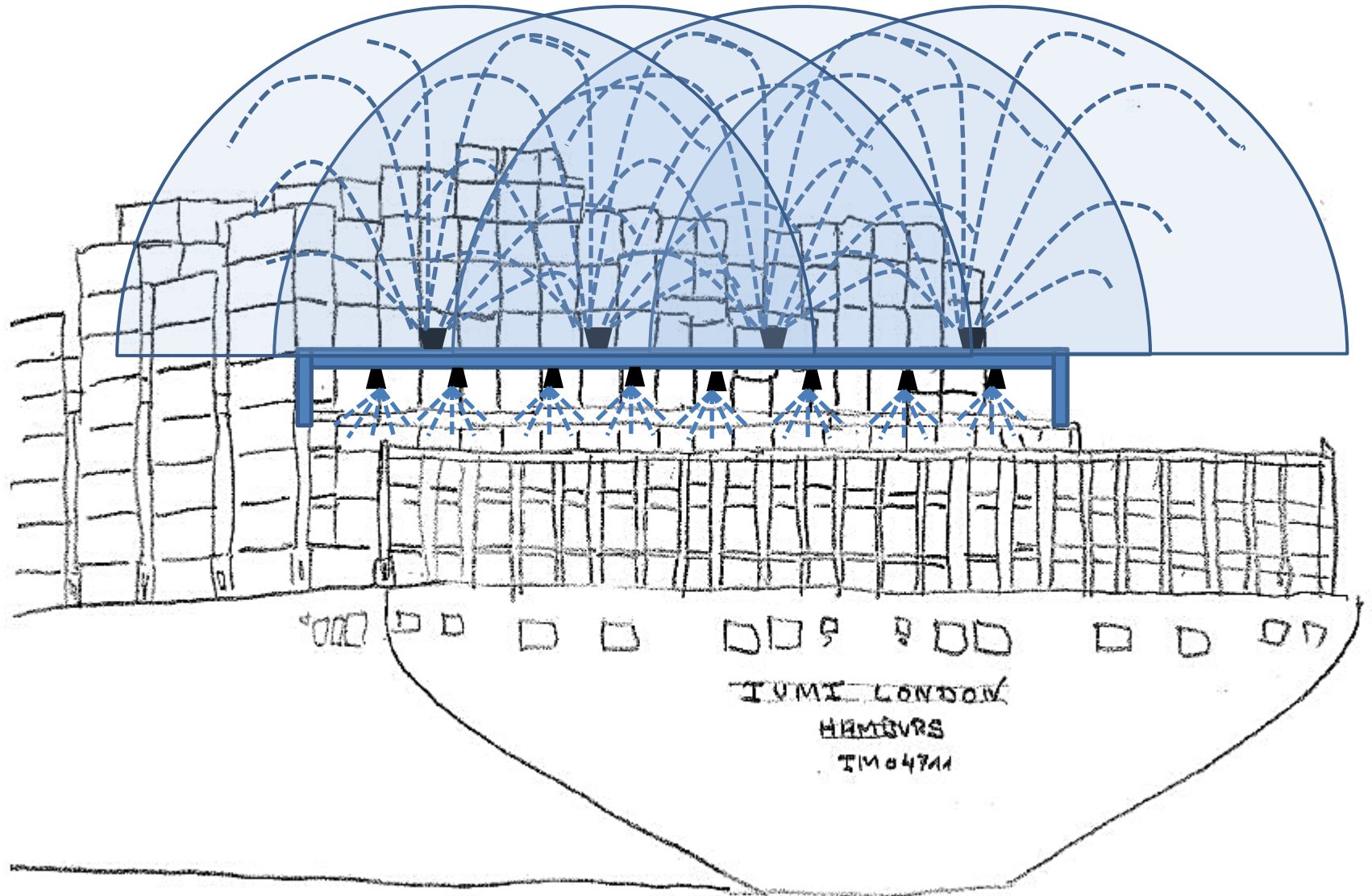
Lashing bridge with water curtain



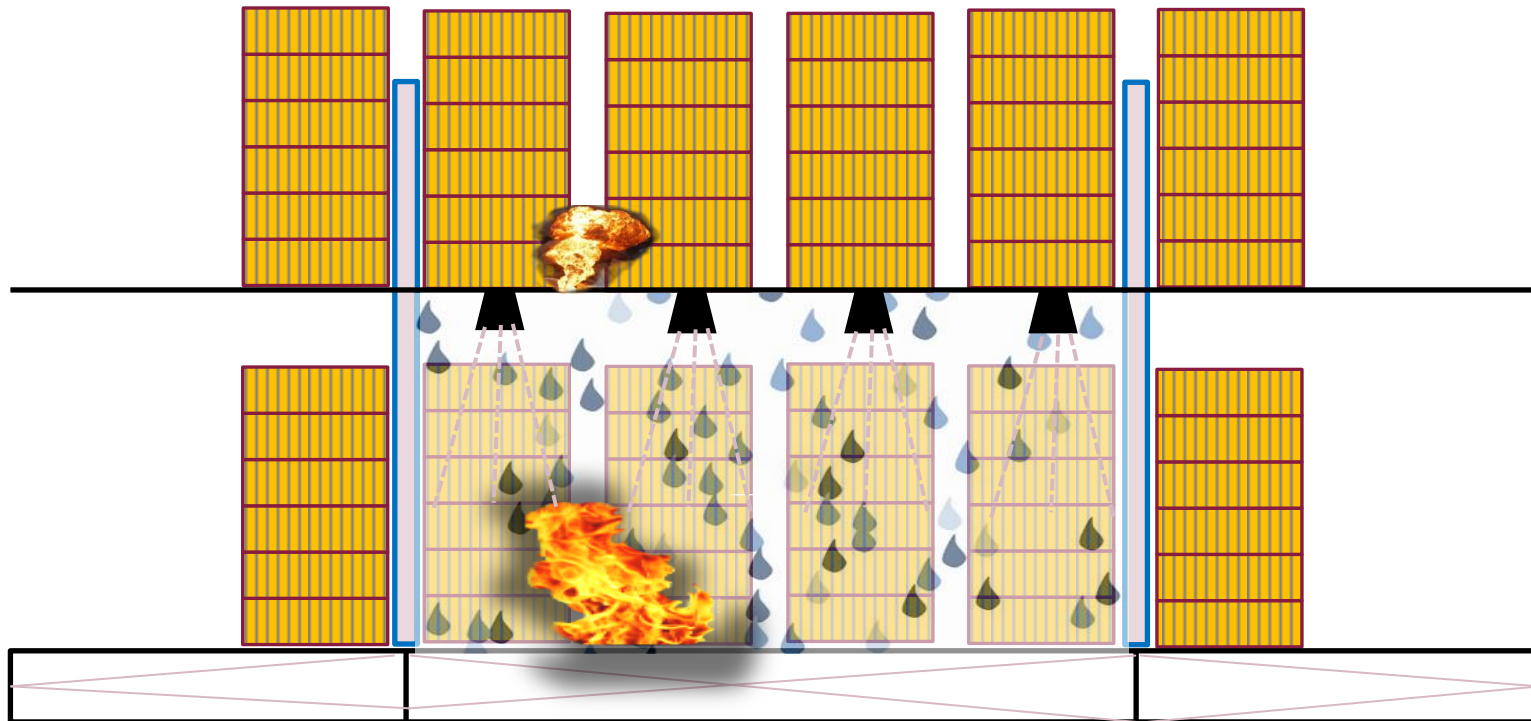
Water-screen in use



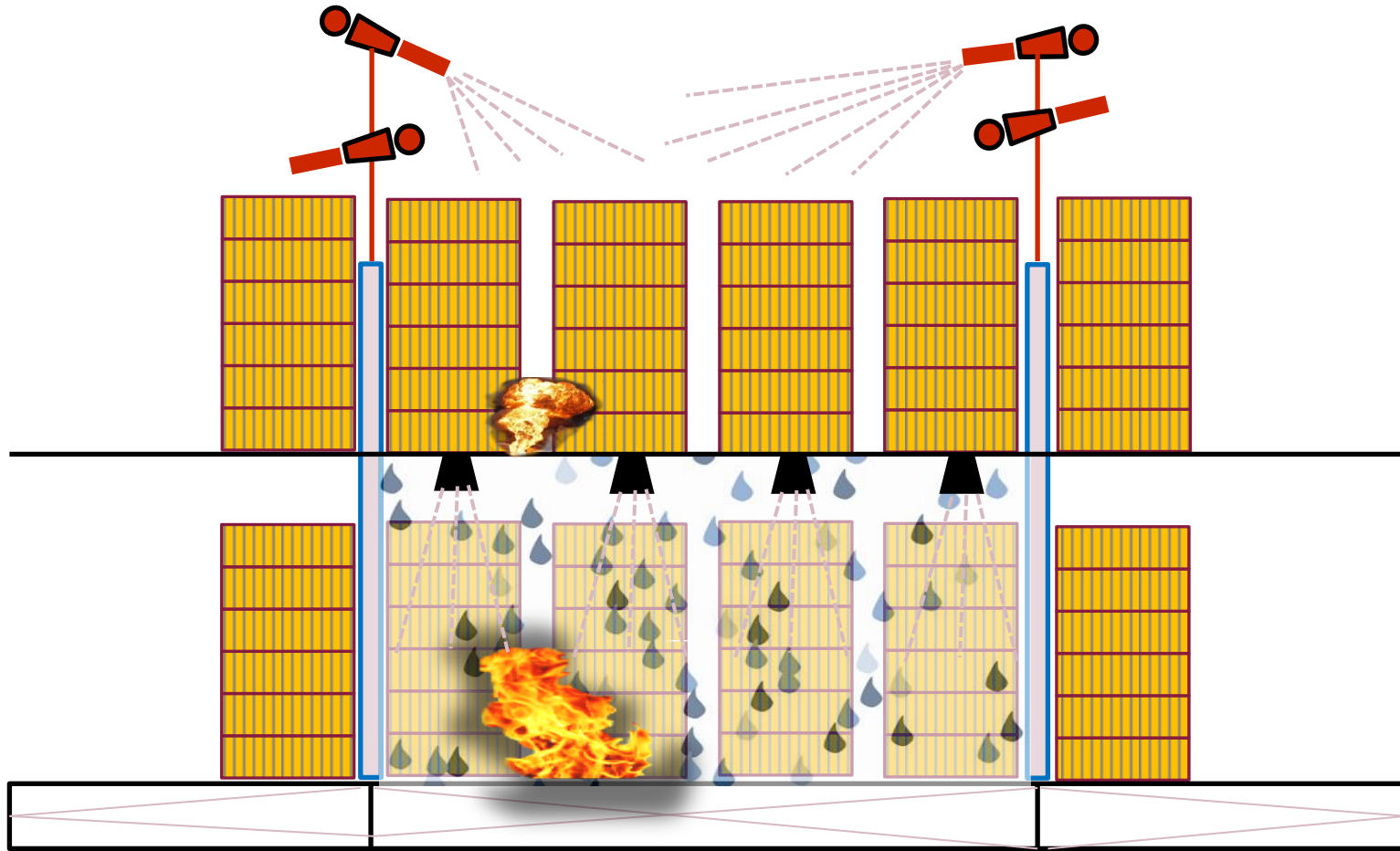
Lashing bridges with water curtain and water-screen



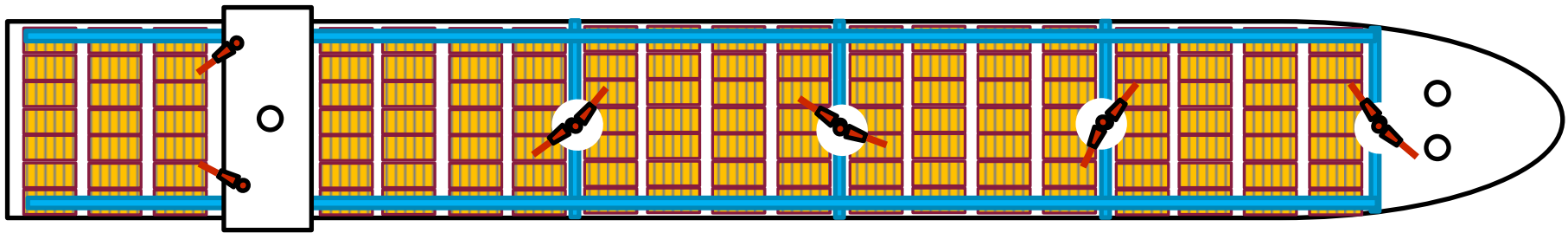
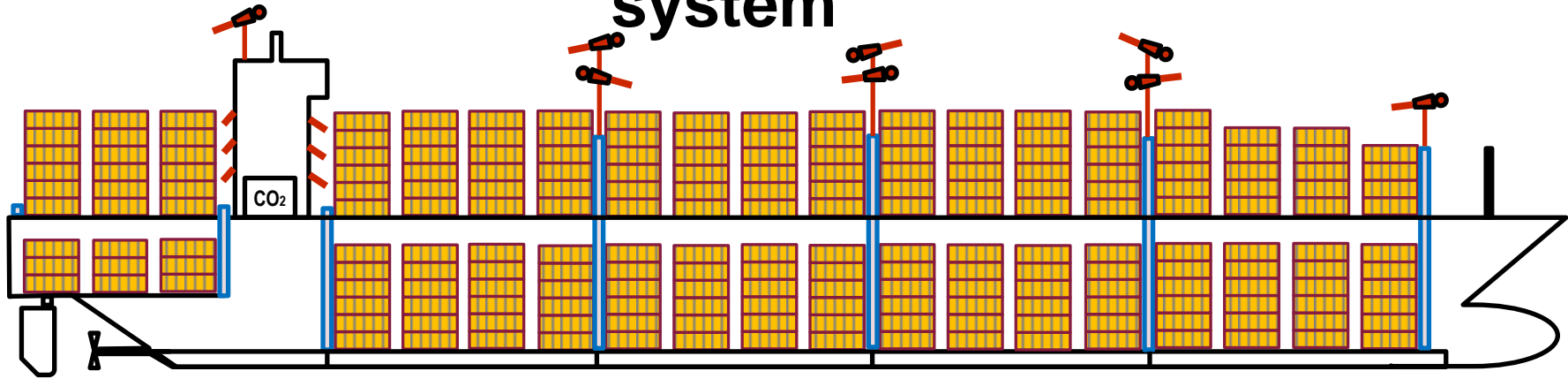
Partitioning on deck and below deck



Active firefighting



An adequately dimensioned firefighting system



Taking stock:

- January 1, 2000: Container ships with a capacity of 4 million TEU
- January 1, 2019: Container ships with a capacity of 22.0 million TEU
- Distributed over 5255 vessels larger than 300 tdw
- Constant decrease in construction prices since 1983
- Vessels are growing in size and capacity
- Is the fire protection system fit for purpose?

Taking stock:

- Constant decrease in construction prices since 1983
- Vessels are growing in size and capacity
- has fire protection system reacted to the fact that cargo is now transported in containers

Conclusion:

- These proposals are "revolutionary"
- Fire protection development has been dormant for 30 years
- New systems will cost money, but
- What are the values on the other side of the equation?
- These are ideas that need to be further developed

Firefighting System on Container Vessels

International Marine Claims Conference IMCC 2019

Uwe-Peter Schieder (Master Mariner)

Vice Chair IUMI LPC

International Marine Claims Conference

Container Fires & Misdeclarations

Peregrine Storrs-Fox | Risk Management Director, TT Club

Dublin | 26 September 2019







Home truths...



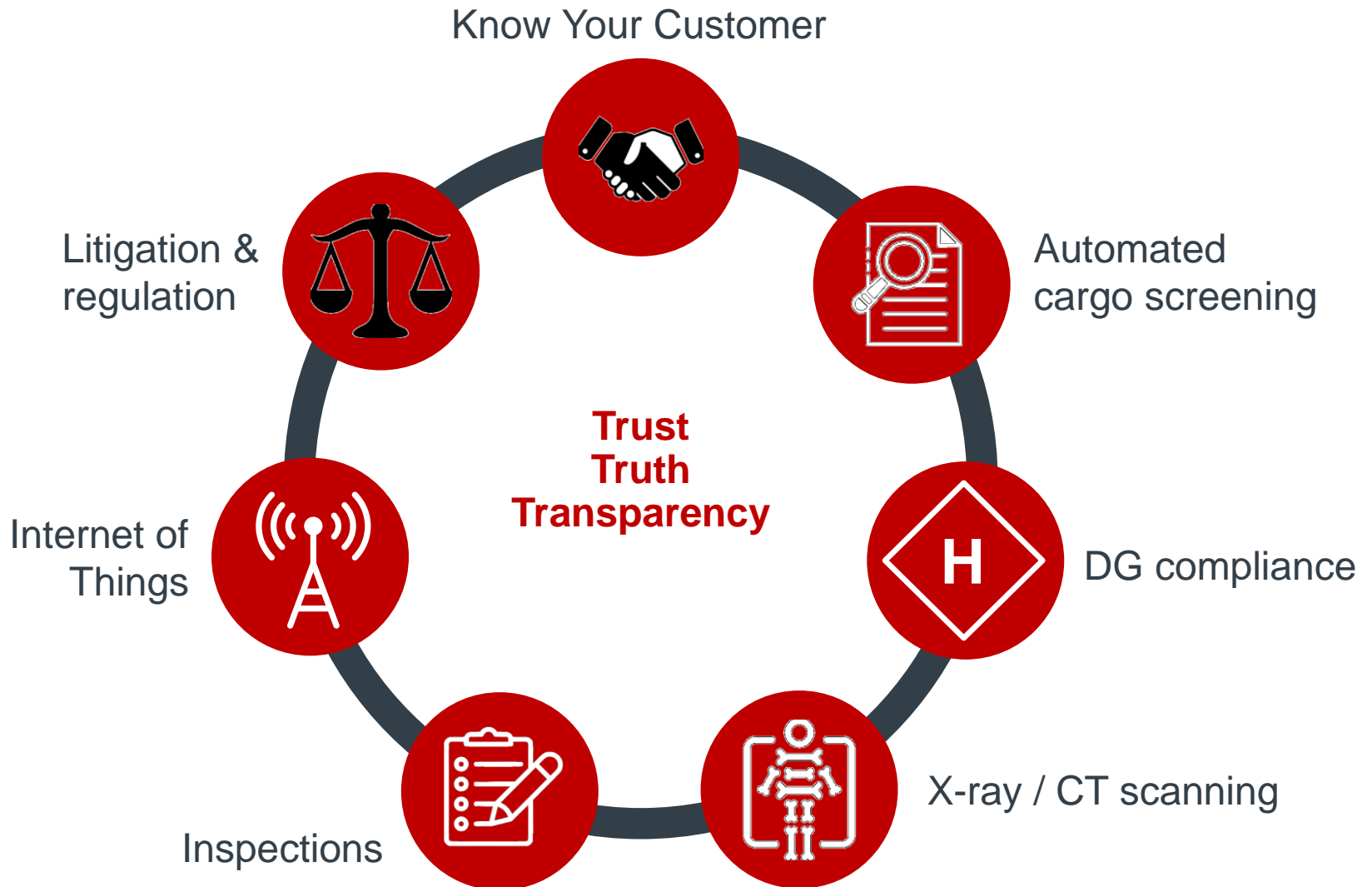
Legal soundbites

- 'Kapitan Sakharov' [2000]
- 'MSC Flaminia' [2018]

Current obfuscation

- Dangerous goods regulations
- Mismatching coding
- Information flows
- Undeclared & misdeclared





Direct stakeholders



Indirect stakeholders

- Trade practices (eg. INCOTERMS, contract terms)
- Fiscal (eg. customs), Health (eg. phytosanitary), Security/Crime, Anti-trust
- Enforcement agencies (eg. training)
- Insurances & surveyors (cf. MSC.1/Circ.1531)
- Technological innovation (eg. monitoring, reporting, apps)

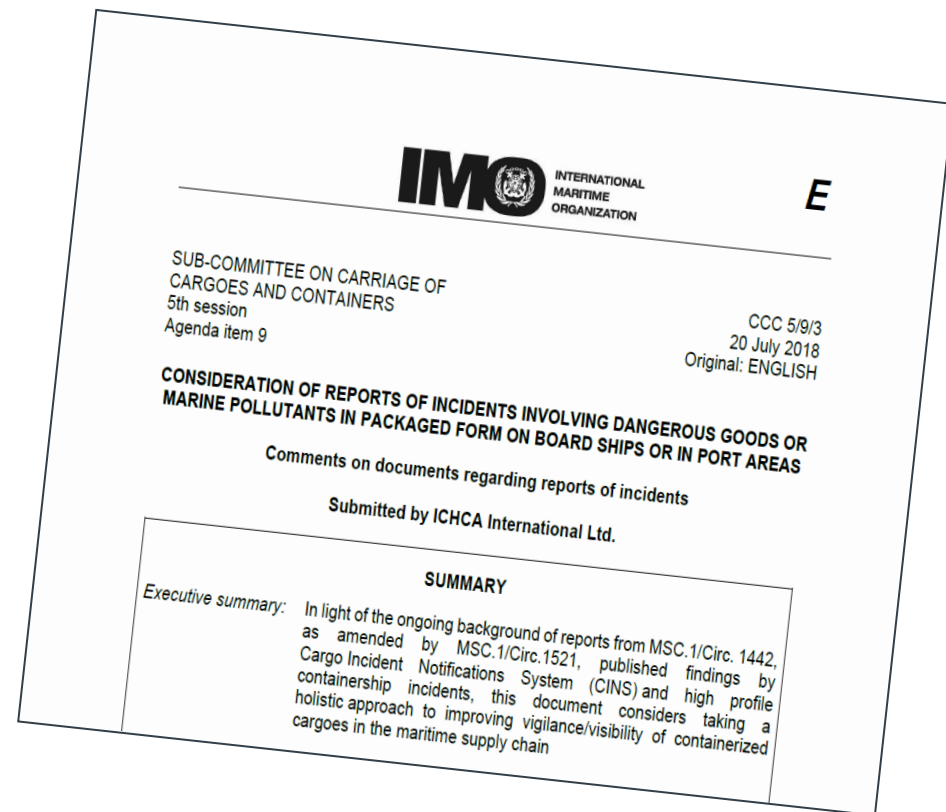


Call to action

- Galvanising fragmented stakeholders
- Reconciling diverse interests
- Legal & operational innovation

Cargo Integrity [#Fit4Freight] campaign

- Deconstructing supply chains
- Redefining drivers & behaviours
- Competence training
- Breaking language / literacy barriers



An aerial photograph of a ship's deck, showing a large stack of colorful shipping containers (red, blue, yellow, orange, and purple) arranged in a grid pattern. The ship's superstructure is visible at the top of the frame.

Thank you

Any questions?

Peregrine Storrs-Fox

peregrine.storrs-fox@thomasmiller.com

riskmanagement@ttclub.com

ttclub.com

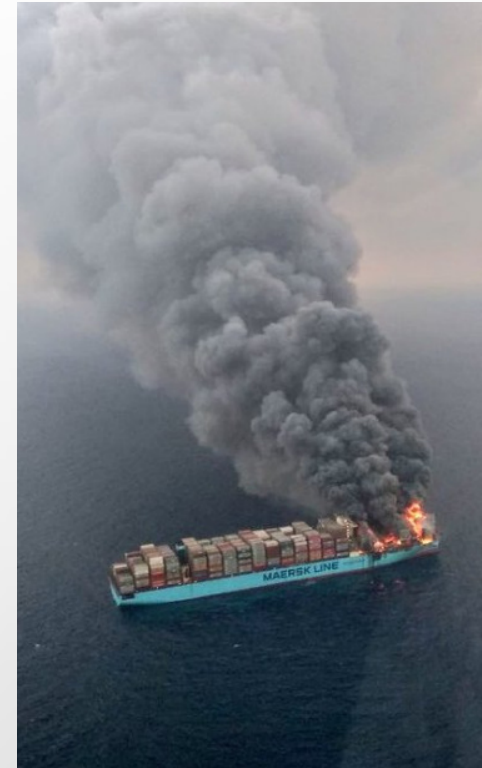
TT CLUB 

CONTAINER SHIP FIRES - SALVAGE

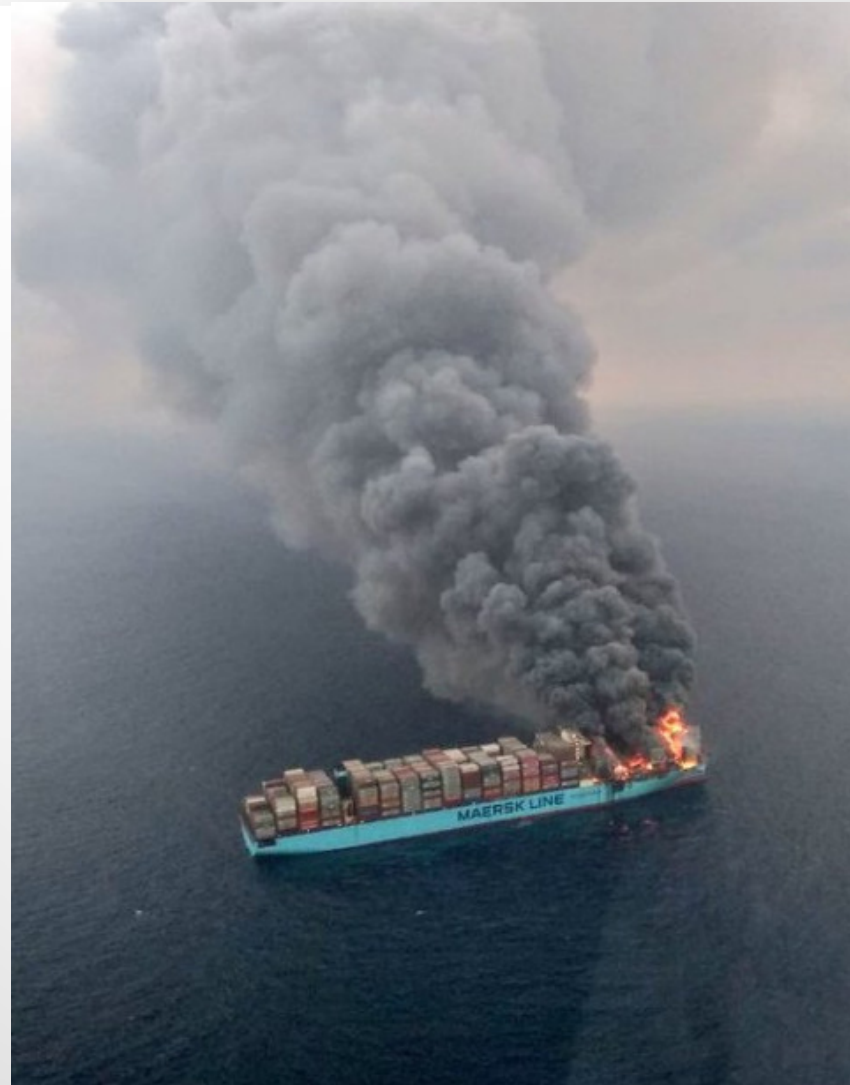


KEYPOINTS:

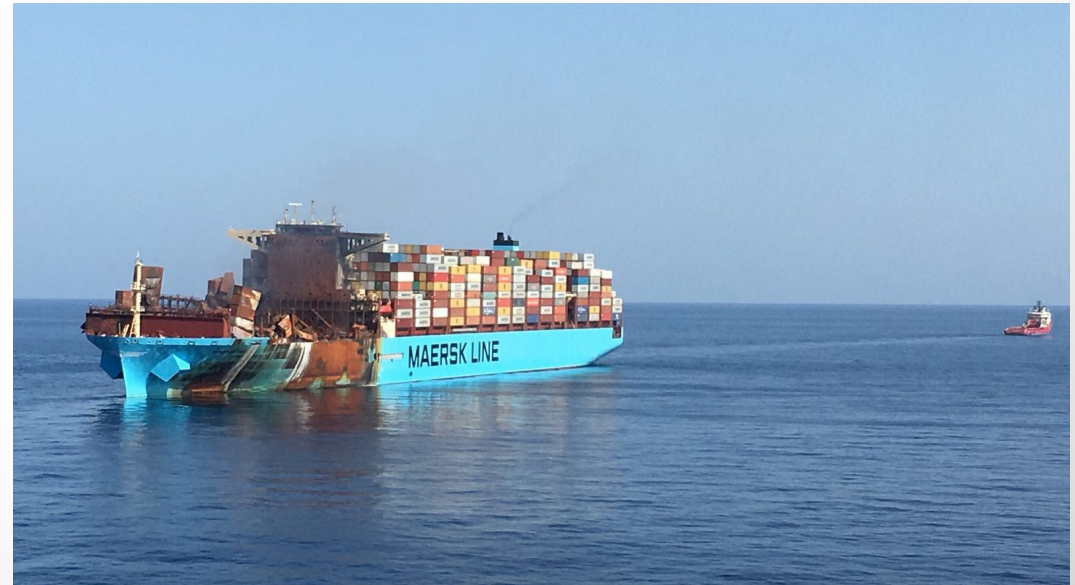
- It will happen. Again. And bigger.
- Be ready and prepared. Relevant to all stakeholders.
But what does it mean?
- Salvage indeed costly. Because of increased complexity and magnitude.
- Misdeclaration of cargo big challenge for the safety and efficiency of salvors.
- Pressure on margins of salvors.
- Increased focus on post firefighting scope.



MAERSK HONAM – THE OPERATION



MAERSK HONAM – THE COMPLEXITIES



MAERSK HONAM – THE AFTERMATH



ANOTHER ONE!? – APL LE HAVRE



Urgent Transmission from Lloyd's List Intelligence Casualty Reporting Service

Message Generated 15:25:43 09-Aug-19 UK Time

Tel: +44 (0)207 017 5205

Fax: +44 (0)207 017 4143

Email: casualty@informa.com

APL LE HAVRE (Republic of Singapore)

Portsmouth, UK, Aug 9 -- MRCC Mumbai reports that fully cellular containership *APL Le Havre* (113735 gt, built 2012) reported that a fire occurred on board, while proceeding off Perbandar, India in position lat 21 06 00N, long 69 01 48E, at 1900 hrs, local time, today. -- Correspondent.

(Note -- *APL Le Havre*, Class: DNV GL, 123137 Dwt, IMO No: 9461881, P&I Club: North of England P & I Association, Contact: CCB Marine Corporation Limited, Hong Kong, Hong Kong Tel/Fax Unknown)

Regards, Lloyd's List Intelligence Casualty Reporting Service

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Container Fire Aboard APL Boxship Brought Under Control



Courtesy Defense Gujarat

BY [THE MARITIME EXECUTIVE](#) 2019-08-13 16:53:06

A container fire broke out aboard the boxship *APL Le Havre* off the coast of Gujarat last Friday evening, prompting a response from the Indian Coast Guard.

On Friday, the *APL Le Havre* departed Karachi, bound for Nhava Sheva, a port complex outside Mumbai. A fire broke out in a container stack aft of the deckhouse at 1915 hours while the vessel was at a position about 40 nm Porbandar, Gujarat.

The cutter *ICGS Sangram* diverted to the scene to provide assistance, and her crew used a water cannon to spray down the *Le Havre*. After several hours of effort, the boxship's crew were able to extinguish the fire by making holes in the affected containers and filling them with water.