











Large ships, salvage and Landmark

- Modified, with permission, from a presentation given at IUMI 2012 by Pete Townsend of Swiss Re
- Presentation by Jonathan Spencer of JSSUSA.com – The Spencer Company at Marine Insurance Day, New York, October 5th 2012

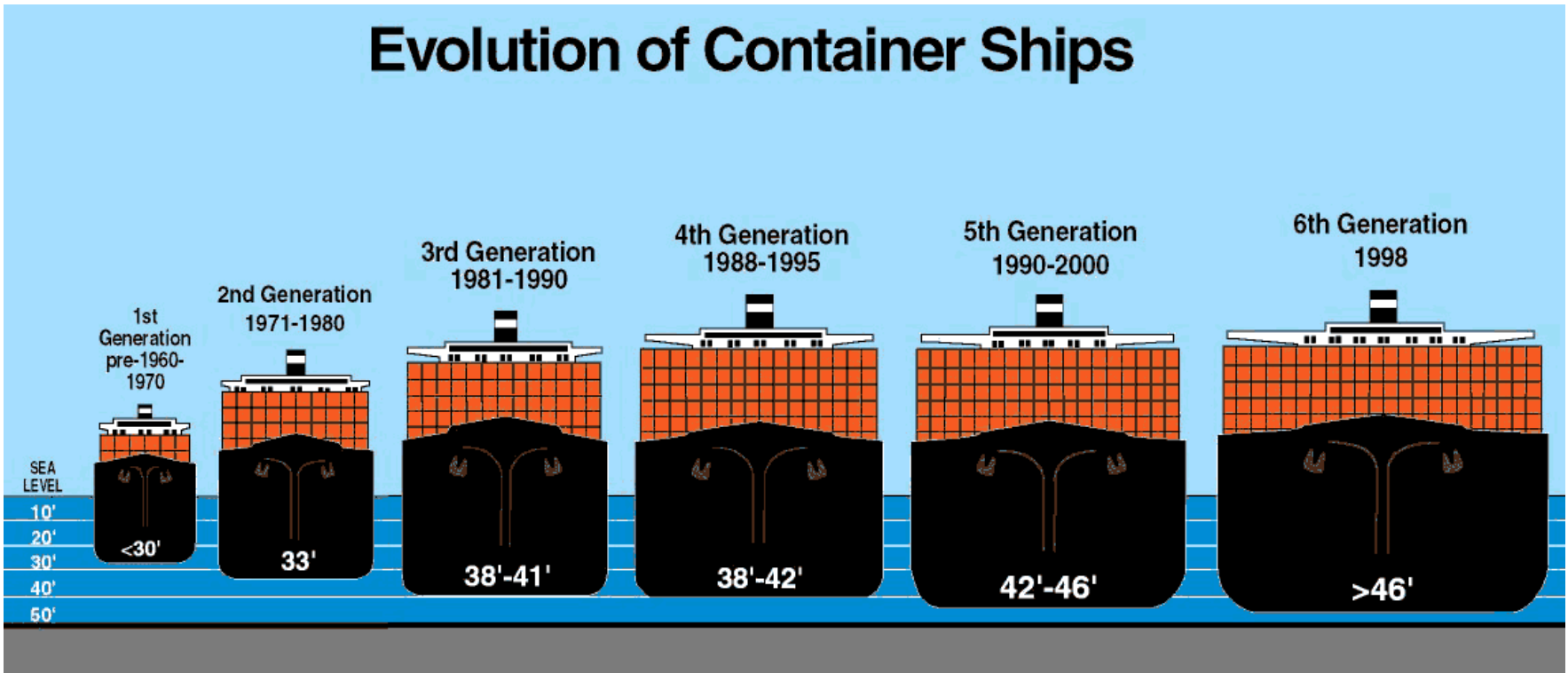


Growth of containerships

		Length	Draft	TEU
First (1956-1970)	 Converted Cargo Vessel	135 m	< 9 m	500
	 Converted Tanker	200 m	< 30 ft	800
Second (1970-1980)	 Cellular Containership	215 m	10 m 33 ft	1,000 – 2,500
Third (1980-1988)	 Panamax Class	250 m	11-12 m	3,000
		290 m	36-40 ft	4,000
Fourth (1988-2000)	 Post Panamax	275 – 305 m	11-13 m 36-43 ft	4,000 – 5,000
Fifth (2000-2005)	 Post Panamax Plus	335 m	13-14 m 43-46 ft	5,000 – 8,000
Sixth (2006-)	 New Panamax	397 m	15.5 m 50 ft	11,000 – 14,500



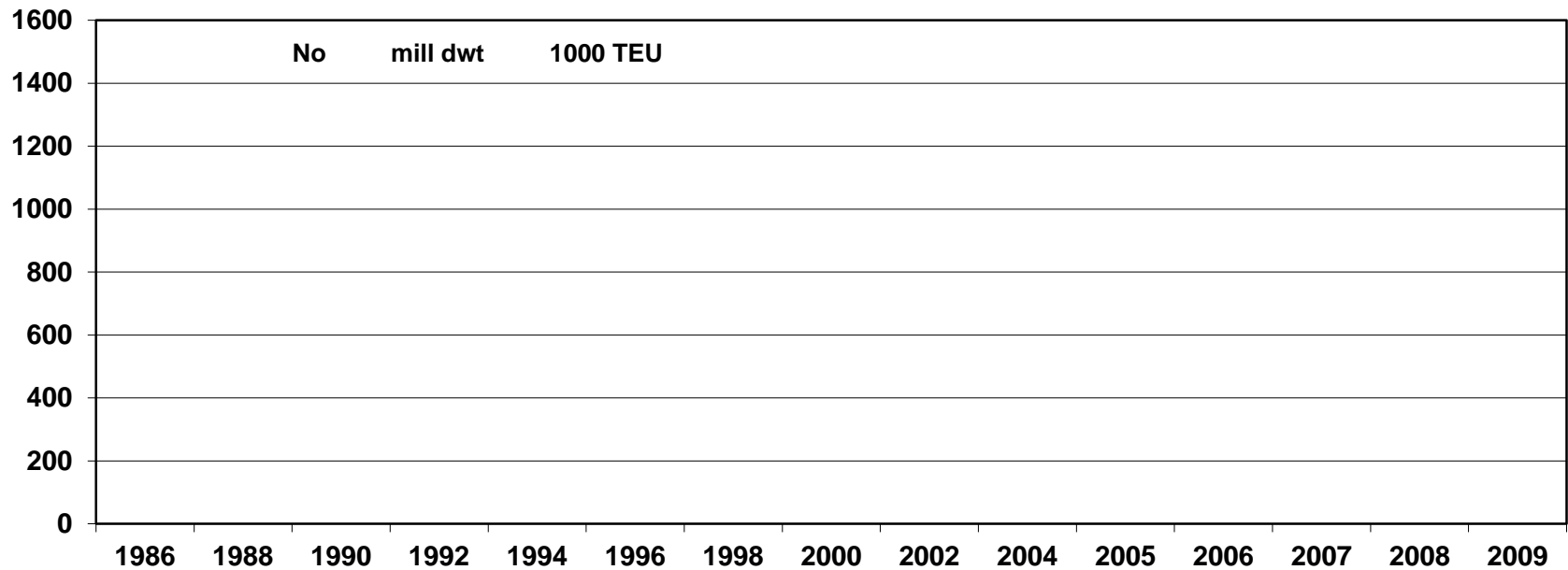
Evolution of Container Ships





Container Fleet Development

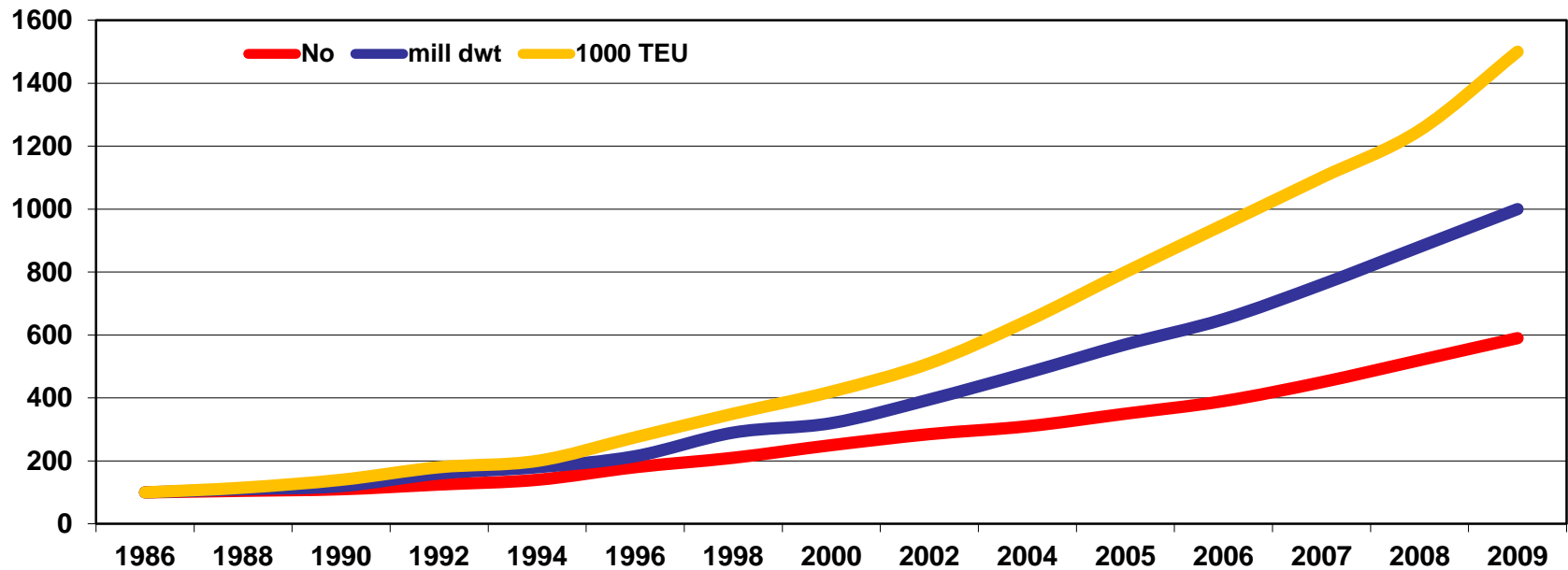
As of January 1st, 1986 – 2009 (Index 1986 = 100)





Container Fleet Development

As of January 1st, 1986 – 2009 (Index 1986 = 100)





MSC Fabiola enters San Francisco bay 21st March 2012





How big.....?

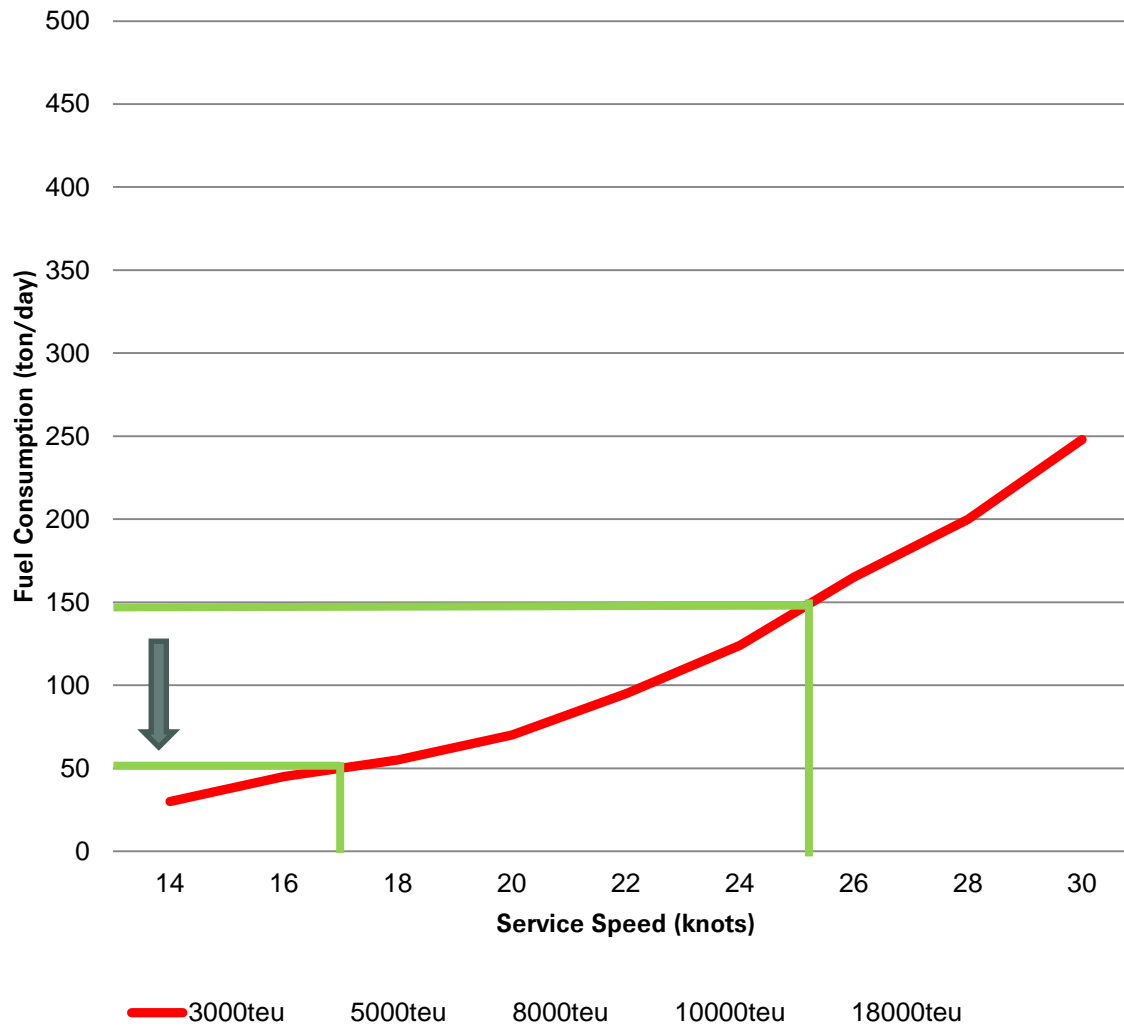






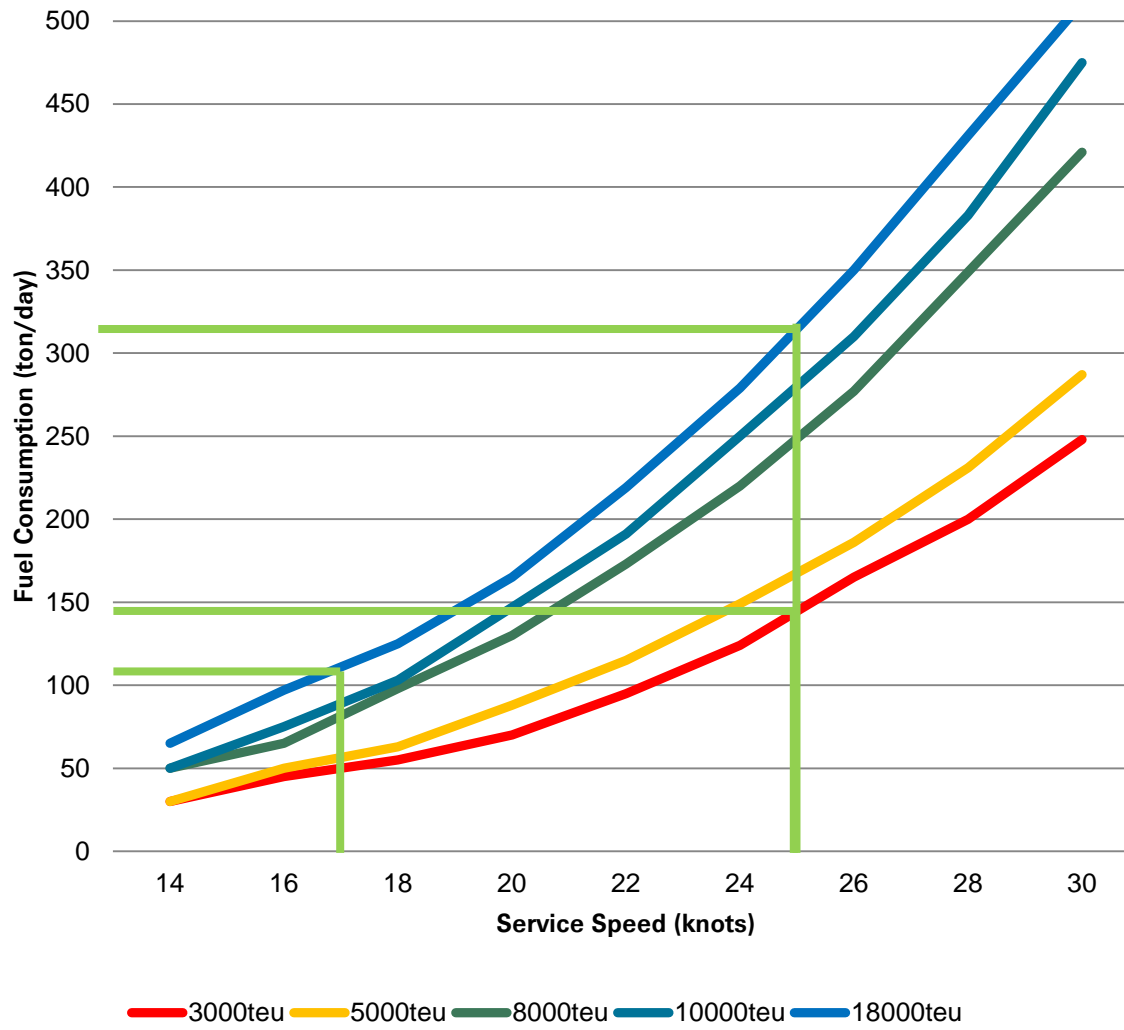


Fuel Consumption Tons per Day





Fuel Consumption Tons per Day

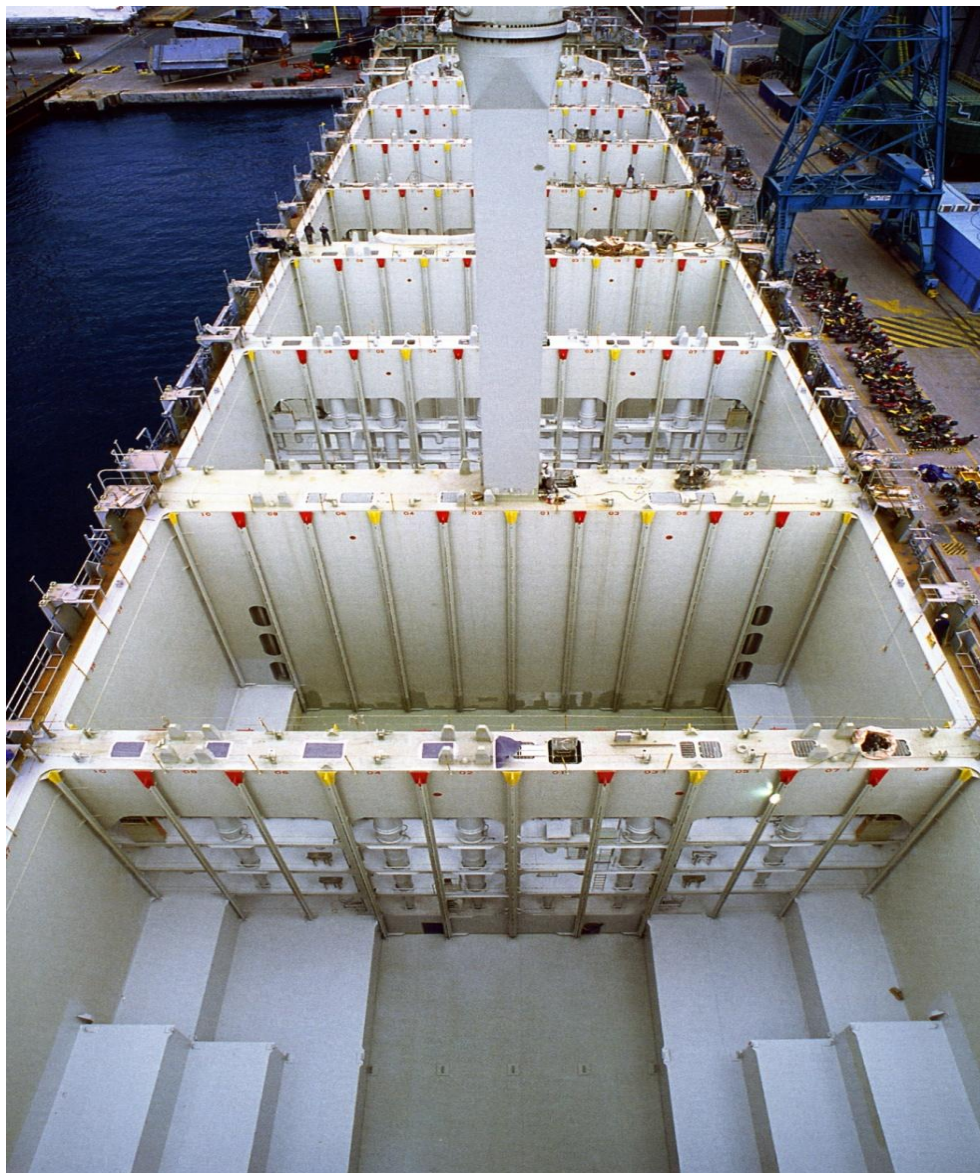




Problem?

What problem?







APL Panama (Ensenada - Christmas Day 2005)



APL Panama (Ensenada - Christmas Day 2005)

Swiss Re



- 4,038 TEU
- 1,805 containers on board
- 52,250 dwt
- LOA 261 metres
- Breadth 32.25 metres (13 containers across)
- Draught 12.52 metres

APL Panama (Ensenada - Christmas Day 2005)



APL Panama (Ensenada - Christmas Day 2005)

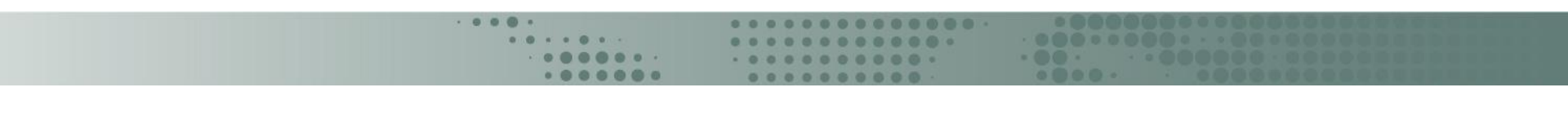
Swiss Re



- Grounded Dec 25th 2005 - Refloated March 10th 2006
- Almost no damage
- 1805 containers on board - Approx. 1,300 discharged
- 1,445 cargo interests - Approx. 1,600 adjuster man hours



Realistic Disaster Scenario





Comparisons

APL Panama

DWT	52,250
TEU across	13
TEU	4,038
(TEU	1,805 on board)
1,445 cargo interests	
1,600 adjuster man hours	

Not completely adjusted 5 year later

Ultra Post Panamax

DWT	157,000
TEU across	22
TEU	15,000
(say 75% laden – 11,250 o/board)	
9,006 cargo interests ????	
9,972 adjuster man hours????	
5 man years to adjust !!	

Help!!!!!!

USD 68,million GA

USD ??? million GA



LOF awards (source - Lloyds.com)

Year	New cases	Ship	Cargo	Other	Total	% Award/values
2001	108	\$50.9	\$107.6	\$2.5	\$161.0	16.7
2002	104	\$81.5	\$173.3	\$6.6	\$264.4	14.2
2003	89	\$72.8	\$94.0	\$2.3	\$169.1	14.7
2004	91	\$47.1	\$93.9	\$3.9	\$144.9	9.9
2005	109	\$64.5	\$119.8	\$1.3	\$181.6	7.8
2006	80	\$53.7	\$31.6	\$0.5	\$85.8	13.6
2007	107	\$172.6	\$210.6	\$9.5	\$392.7	14.8
2008	83	\$203.8	\$92.0	\$3.6	\$299.4	7.1
2009	122	\$161.2	\$401.0	\$8.9	\$571.1	20.4
2010	111	\$26.9	\$37.7	\$1.3	\$65.9	14.4



Realistic Disaster Scenario (courtesy of Rogers Wilkin Ahern)

■ Assumptions:

- 18,000 teu capacity containership, fully laden
- Average container value \$30,000
- Cargo value - \$540,000,000
- Ships sound value assessed at \$190,000,000
- Lloyds' Open Form Salvage awards 15-20%



Realistic Disaster Scenario (courtesy of Rogers Wilkin Ahern)

- Overall venture value \$730,000,000 +/-
- **LOF 15% = \$109,500,000 (+ interest and costs)**
- With Additional GA sacrifice and expenditure a total of **\$200,000,000** or more could be anticipated
 - Plus hull PA?
 - Plus cargo PA?
 - Removal of wreck?



It'll never happen though.....



CMA CGM Libra grounded off Port of Xiamen





UASC Al Rawdah grounded off Batu Berhanti, Indonesia



19th June 2011

MSC Luciana engine trouble and grounded leaving Antwerp





Rena grounded off New Zealand



5th Oct 2011



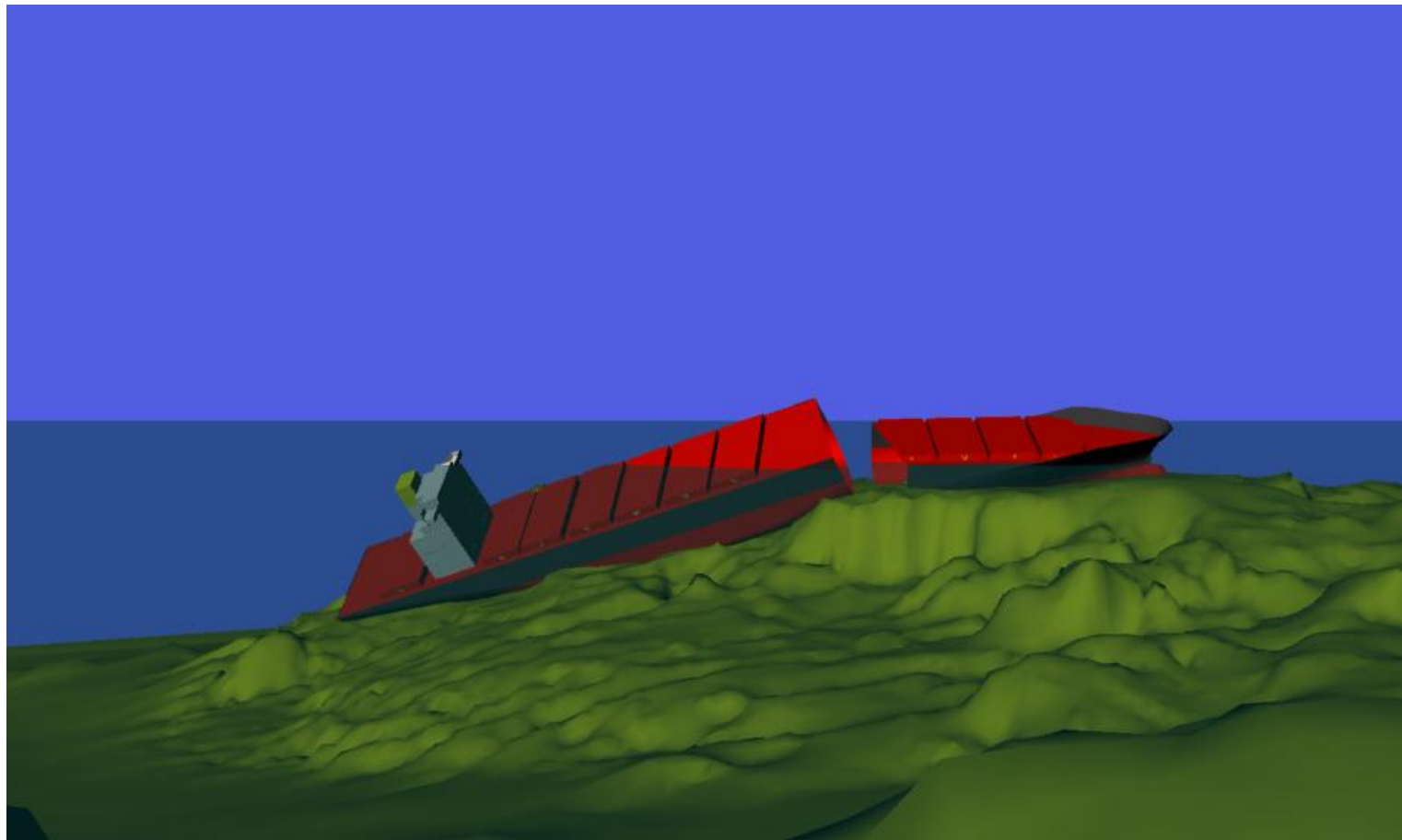


5th April 2012





Rena as at 5th April 2012





5th April 2012 – 6 months after the casualty

- Big date
- 547 above deck, 821 underdeck
- 1,368 containers on board
- 684 in total removed
- 50%
- Removal rate 1-2 per day

Bareli Grounded off Fuqing, China





Bareli Grounded off Fuqing, China

- 2004 built
- 42,300 dwt
- 3,091 teu capacity
- 1,913 containers on board

Buenos Aires Express – fire off Brazil





Buenos Aires Express

- 2000 Built
- 68,122 dwt
- 5,447 teu capacity

- Fire in engine room
- Reefer cargo expected to be a total loss
- 20 day tow commenced 25th March – a month after casualty

Vale Beijing - 7th December



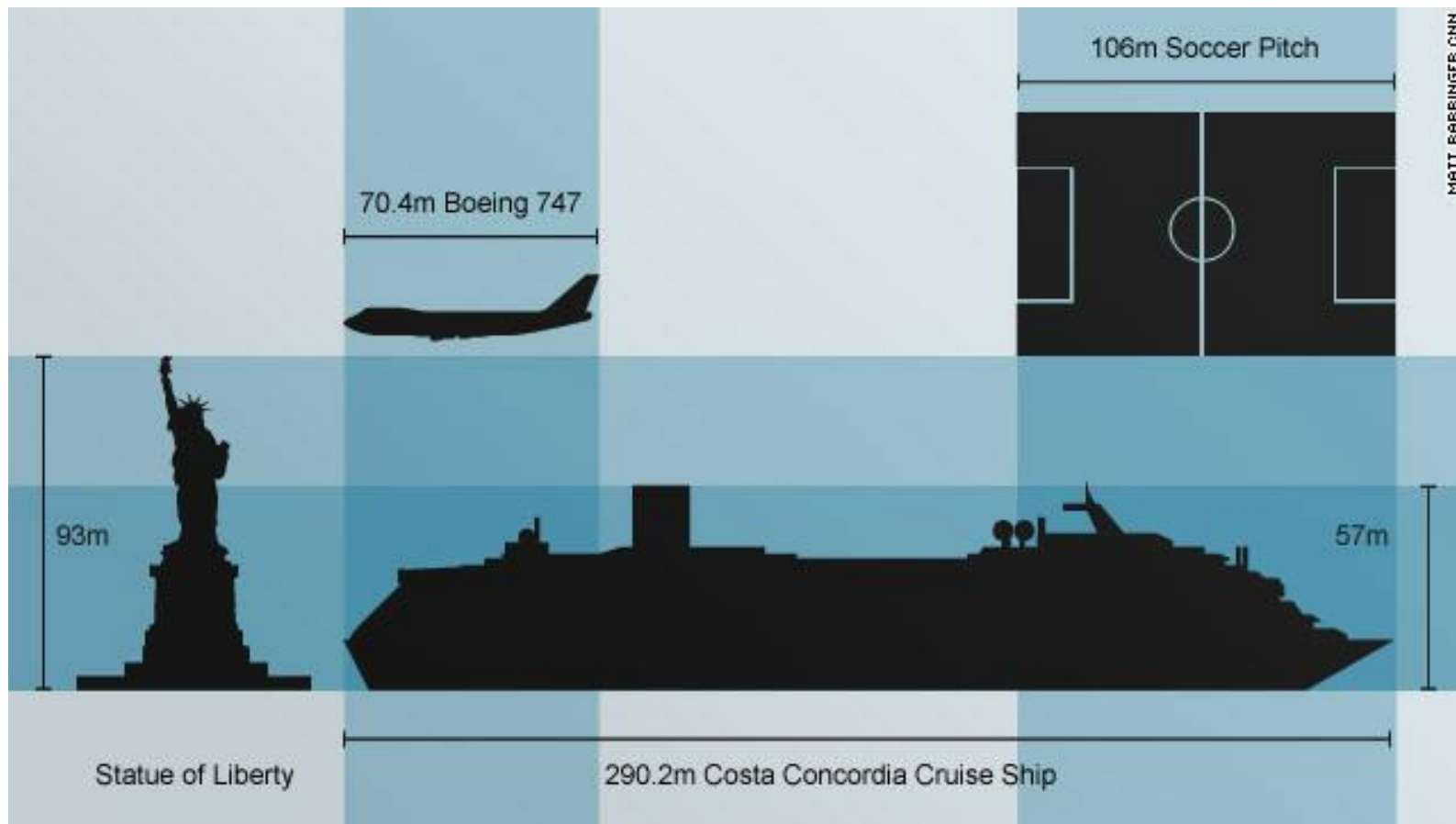


Vale Beijing

Time to complete cargo transfer?	50 days
PA Claim?	USD 5 million approx
GA?	USD 32 million approx
Ships proportion to GA?	USD 22 million approx
Claim to hull underwriters?	USD 27 million (of which < 20% PA)

Costa Concordia – right way up





MATT BARRINGER, CNN

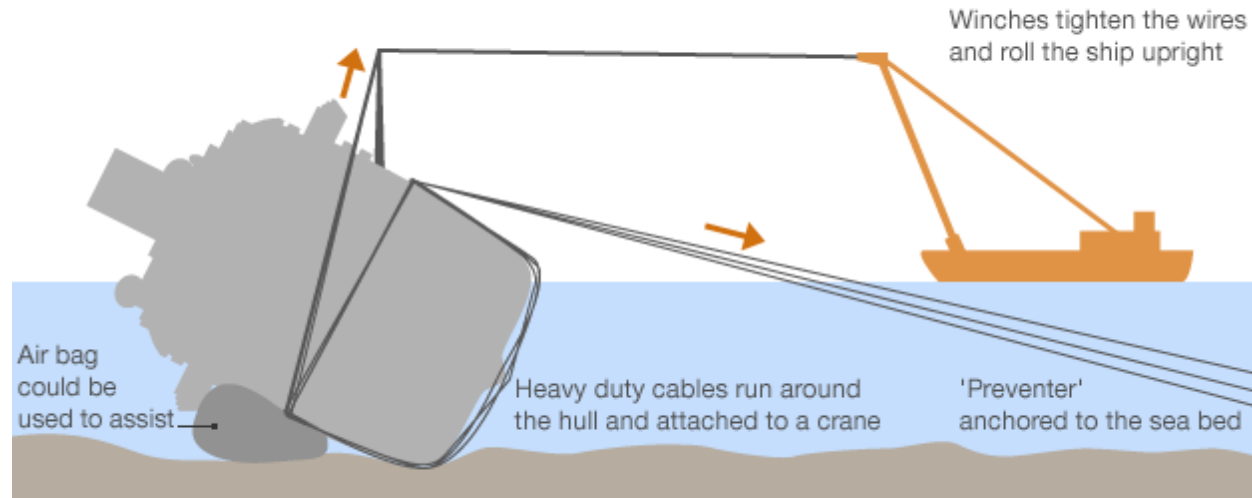


Comparison

		Costa Concordia	Allure of the Seas
LOA		290m	360m
GRT		114,500	120,000
Number of pass decks		13	16
Passengers		3,700	5,400
Crew		1,100	1,800
Deaths		34	N/A

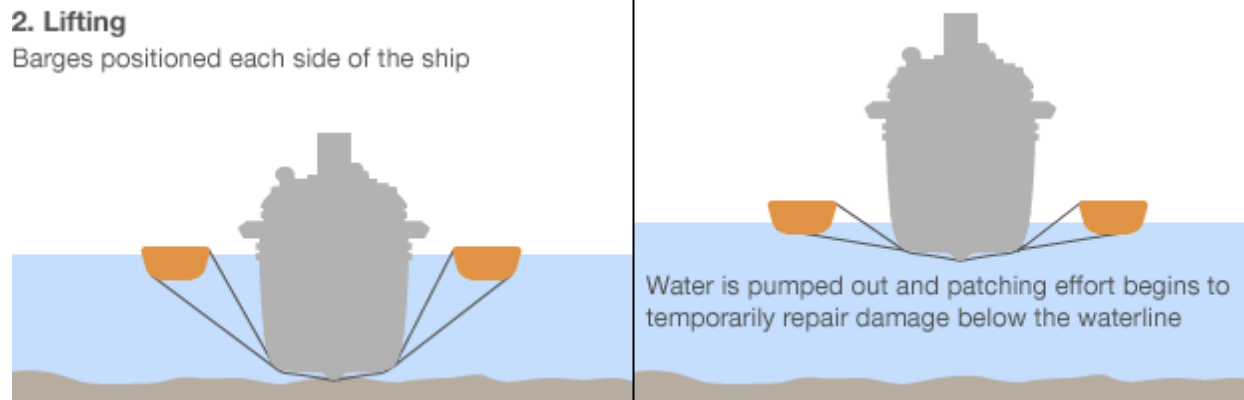
How the Costa Concordia could be salvaged

1. 'Parbuckling' - using crane and cables to right the ship



2. Lifting

Barges positioned each side of the ship



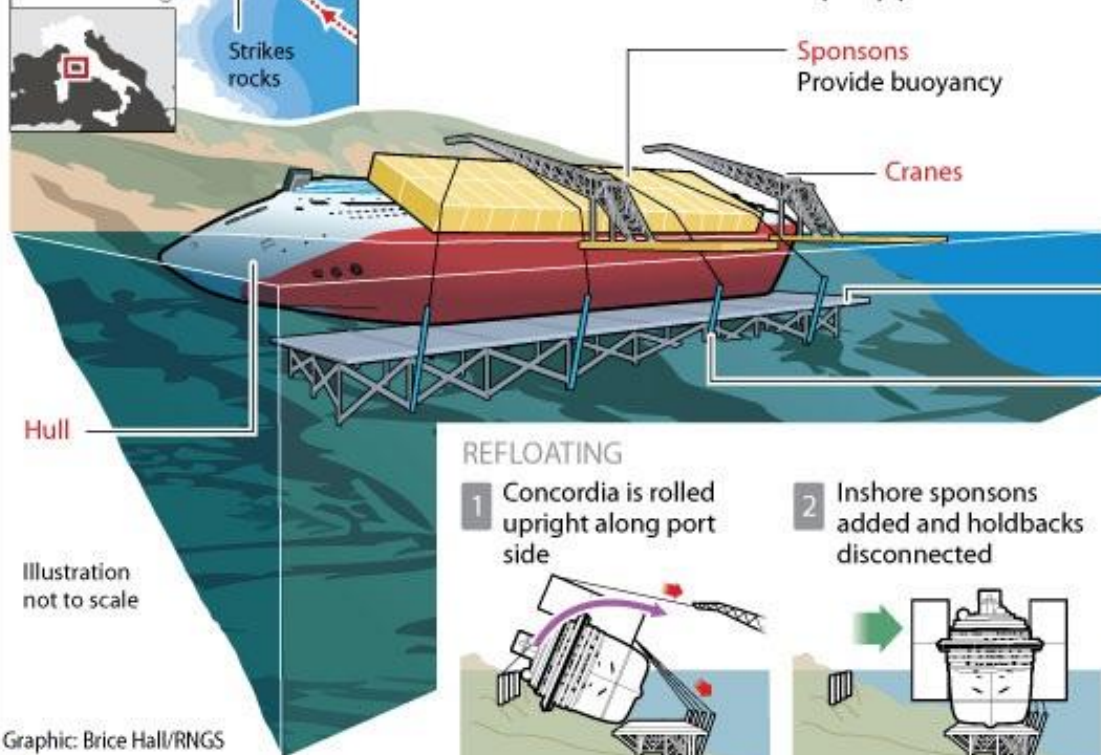


RAISING THE CONCORDIA

U.S.-based Titan Salvage and Micoperi, an Italy-based salvage company, have been selected to recover the wreck of the Costa Concordia, which ran aground off the Italian island of Giglio in January

SETUP

- 1** Ship stabilized to prevent movement
- 2** Grout laid beneath hull to provide support and help ship pivot
- 3** Subsea platform installed
- 4** Sponsons welded to port side



Length: 950 ft
Beam: 117 ft
Weight: 44,612 MT

REFLOATING

- 1** Concordia is rolled upright along port side
- 2** Inshore sponsons added and holdbacks disconnected
- 3** Concordia should float at a level of 61 ft

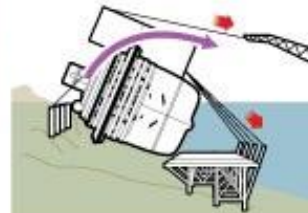


Illustration not to scale

Graphic: Brice Hall/RNGS

REUTERS Source: Titan Salvage



Landmark consortium

- Shipowner assumes cargoes proportion to GA/salvage guarantees
- Only in respect of container ships
- Notional value per container, \$30,000
- Limit \$500,000,000 (being 16,666 teu x \$30,000)
- 1 guarantee for cargo interests
- Enables immediate release of undamaged containers at safe port
- Consolidated and uninsured containers covered



Why would carrier want to buy?

- Never call GA or demand guarantees from Freight forwarder, consignee or consignor
- Very small surcharge per container



Stakeholders

Stakeholder	Rationale
Shipowners	<ul style="list-style-type: none">• Reduced administration costs• Speedier resolution• Great selling point for clients with no detention• No longer have to organize and collect counter guarantee
Salvors	<ul style="list-style-type: none">• No longer have to collect guarantees from each cargo party• Quicker resolution time
Uninsured cargoes	<ul style="list-style-type: none">• No longer have to provide security for each GA/Salvage guarantees
Adjusters	<ul style="list-style-type: none">• Adjusters are spared the time-consuming collection and calculations for thousands of interests and can concentrate on the higher level work of determining the adjusting principles and quantum involved in the casualty.
Insurers	<ul style="list-style-type: none">• Simplified product• Less costs to adjust



Large ships, salvage and Landmark

■ Questions?

peter_townsend@swissre.com

jss@jssusa.com