

Admiralty Law and Insurance Update

Dennis Nixon

University of Rhode Island

2014 RVOC Meeting, 23-25 April 2014

Skidaway Institute of Oceanography

Savannah, Georgia

Image: <http://teacheratsea.files.wordpress.com/2011/07/savannah.jpg>

Outline

- World Insurance Market & Claims
- UNOLS Fleet Insurance Statistics
- Research Vessel News
- Relevant Legal Decisions
- Conclusions



Overview of the World Insurance Market & Claims

Global Marine Insurance Report

Astrid Seltmann

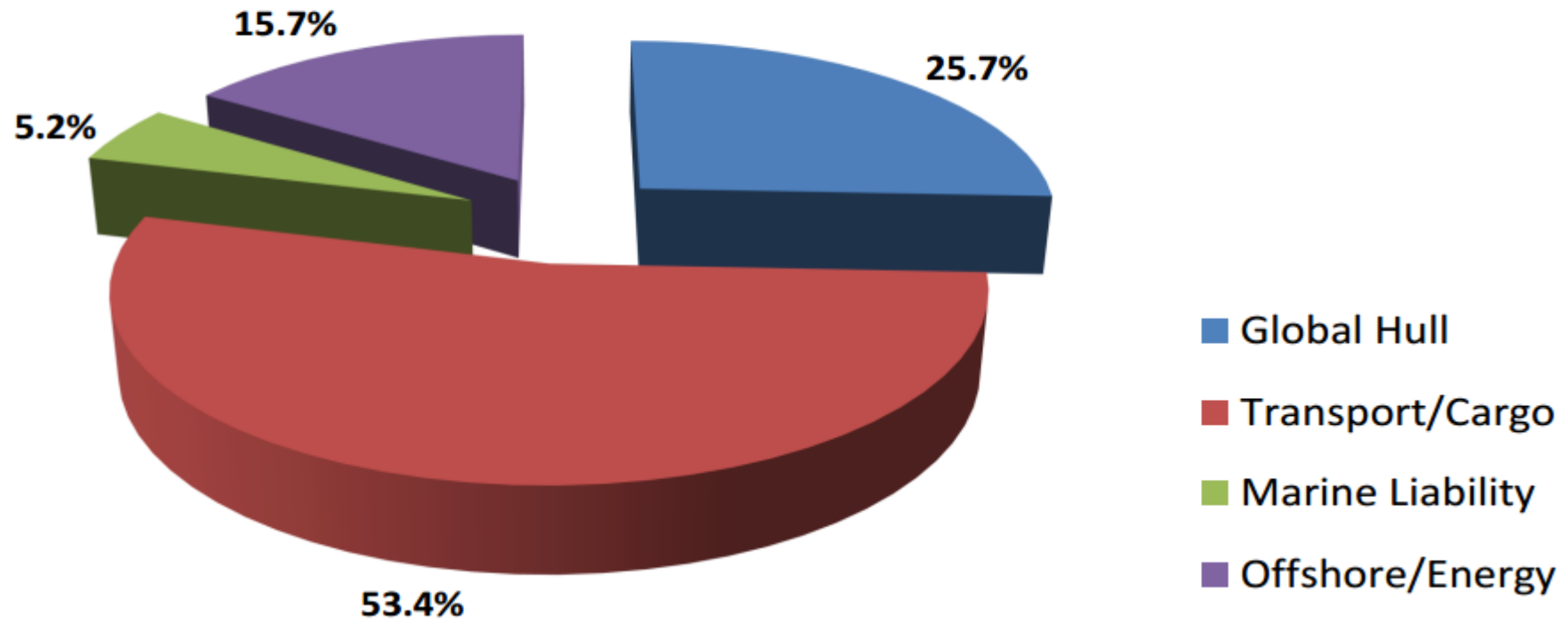
Fact and Figures Committee: Analyst/Actuary,
Cefor - The Nordic Association of Marine Insurers, Oslo



Marine premium 2012 – by line of business

Total: 33.05 USD billion

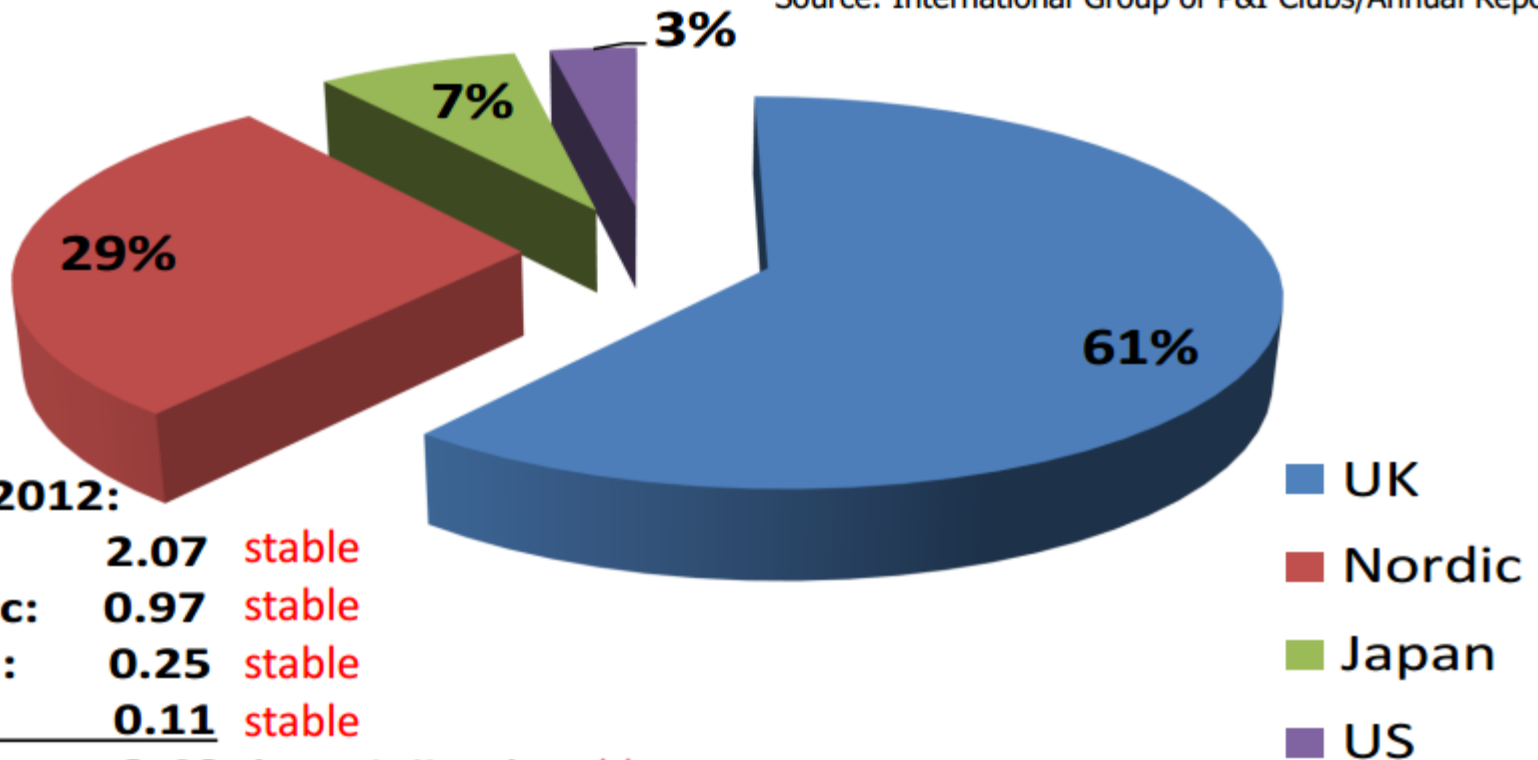
2012



P&I clubs international group

Gross calls (premium) 2012 – operational location

Source: International Group of P&I Clubs/Annual Reports



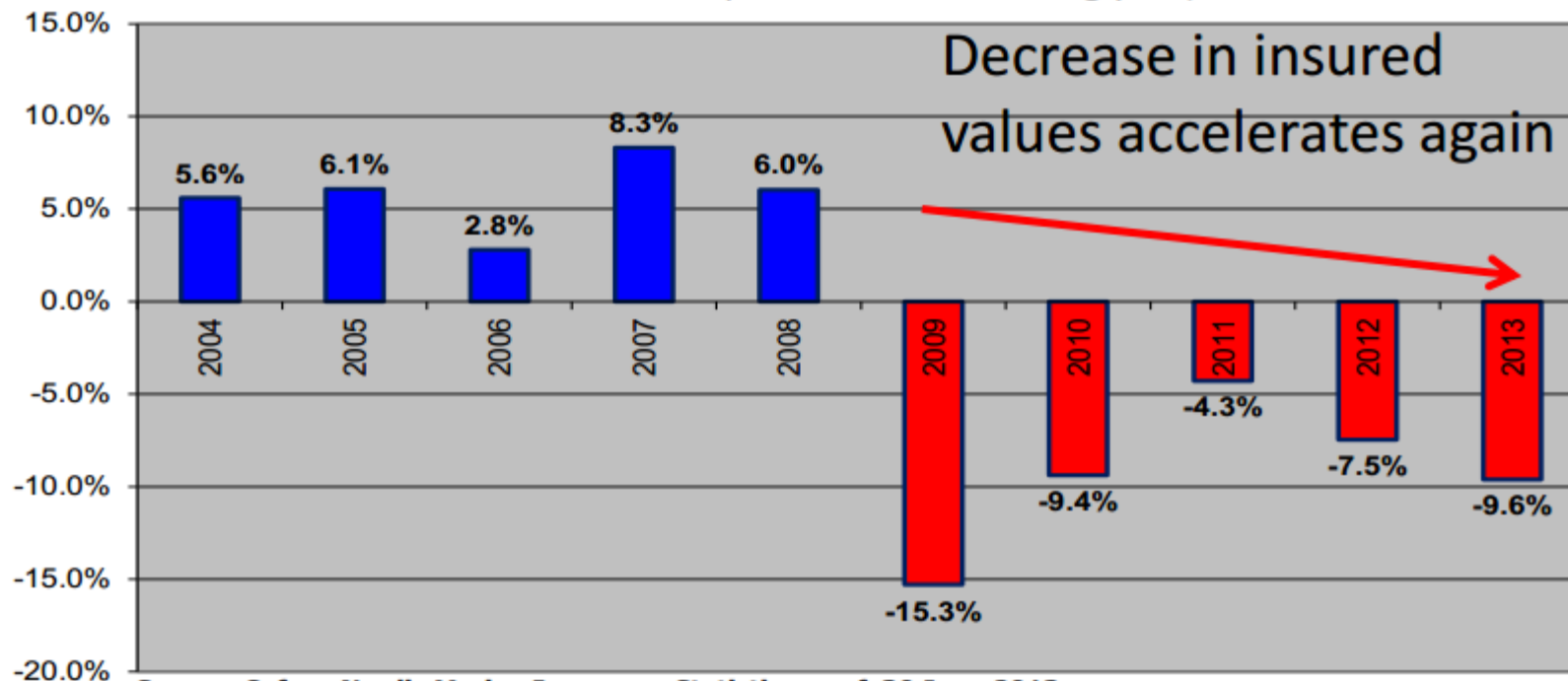
Calls 2012:

UK:	2.07	stable
Nordic:	0.97	stable
Japan:	0.25	stable
US:	0.11	stable
Total:	3.40	(USD billion) stable

Change in insured values on renewed vessels

by year of renewal

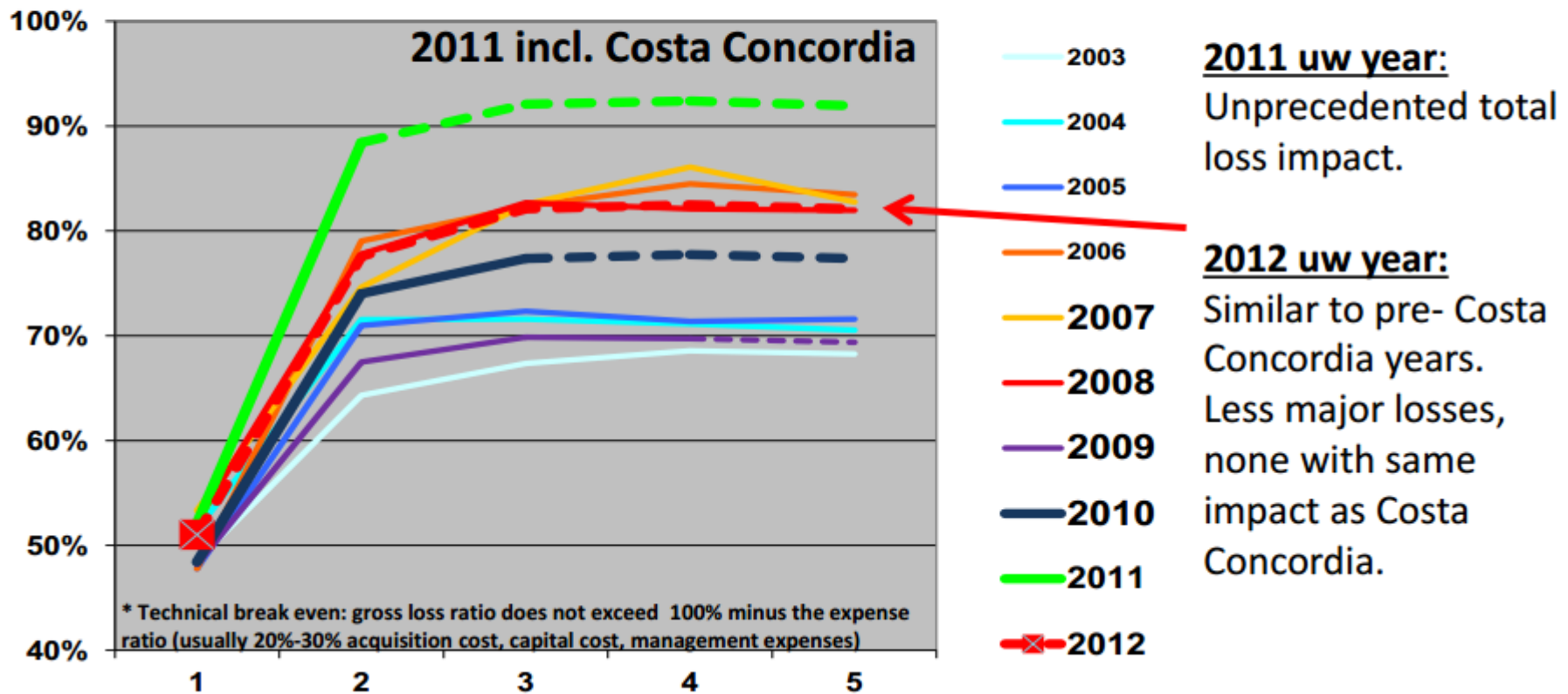
(= insured value on renewal / insured value previous underwriting year)



Source: Cefor - Nordic Marine Insurance Statistics as of 30 June 2013

Hull – gross* ultimate loss ratio (Europe + USA)

Underwriting years 2003 to 2012 – estimated development towards ultimate



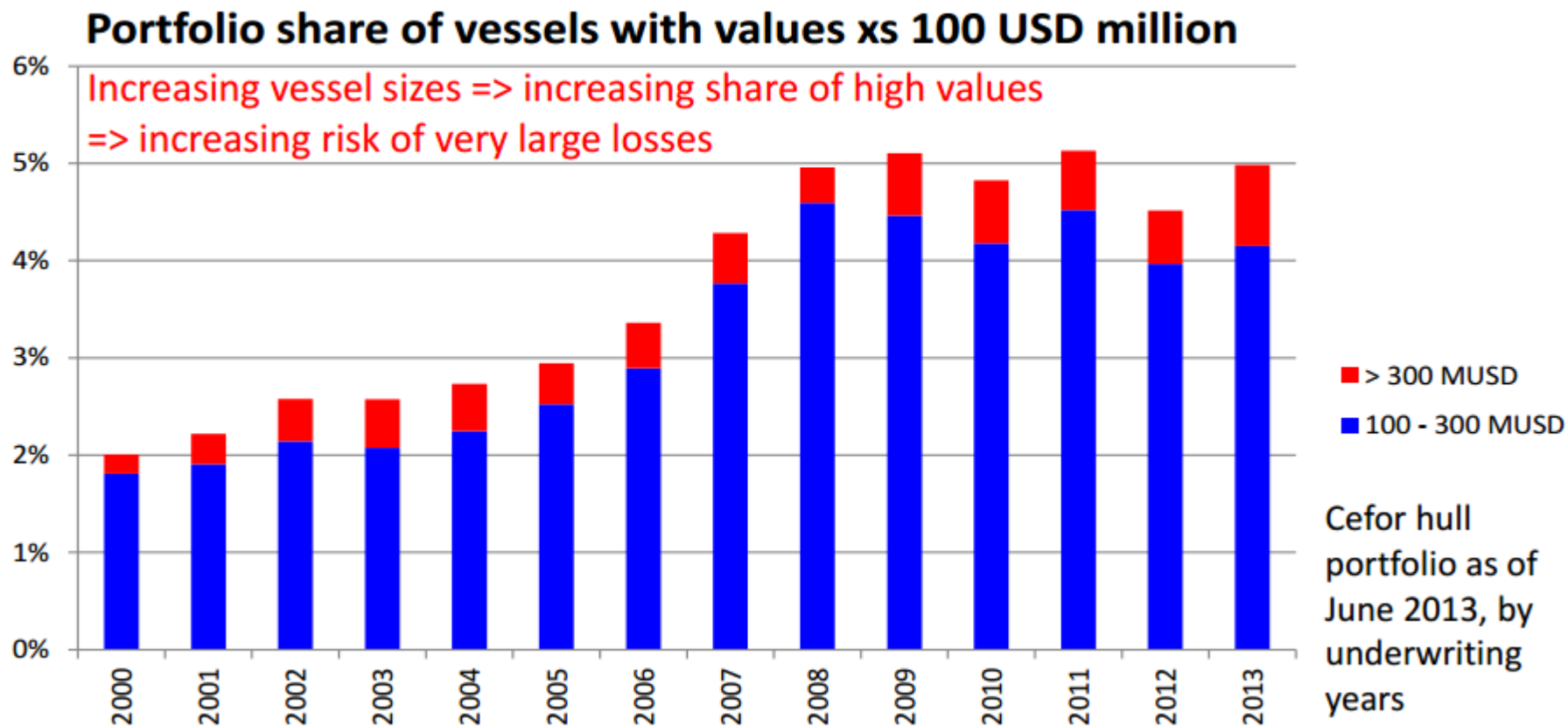
Hull claims trends as of 2013

- Overall claim frequency: Down after peak in 2008
Long-term positive to stable trend
- Total loss frequency: Long-term positive trend
Peak in 2012 possibly exceptional
- Average repair cost: Stable after peak in 2008

=> All-clear signal?

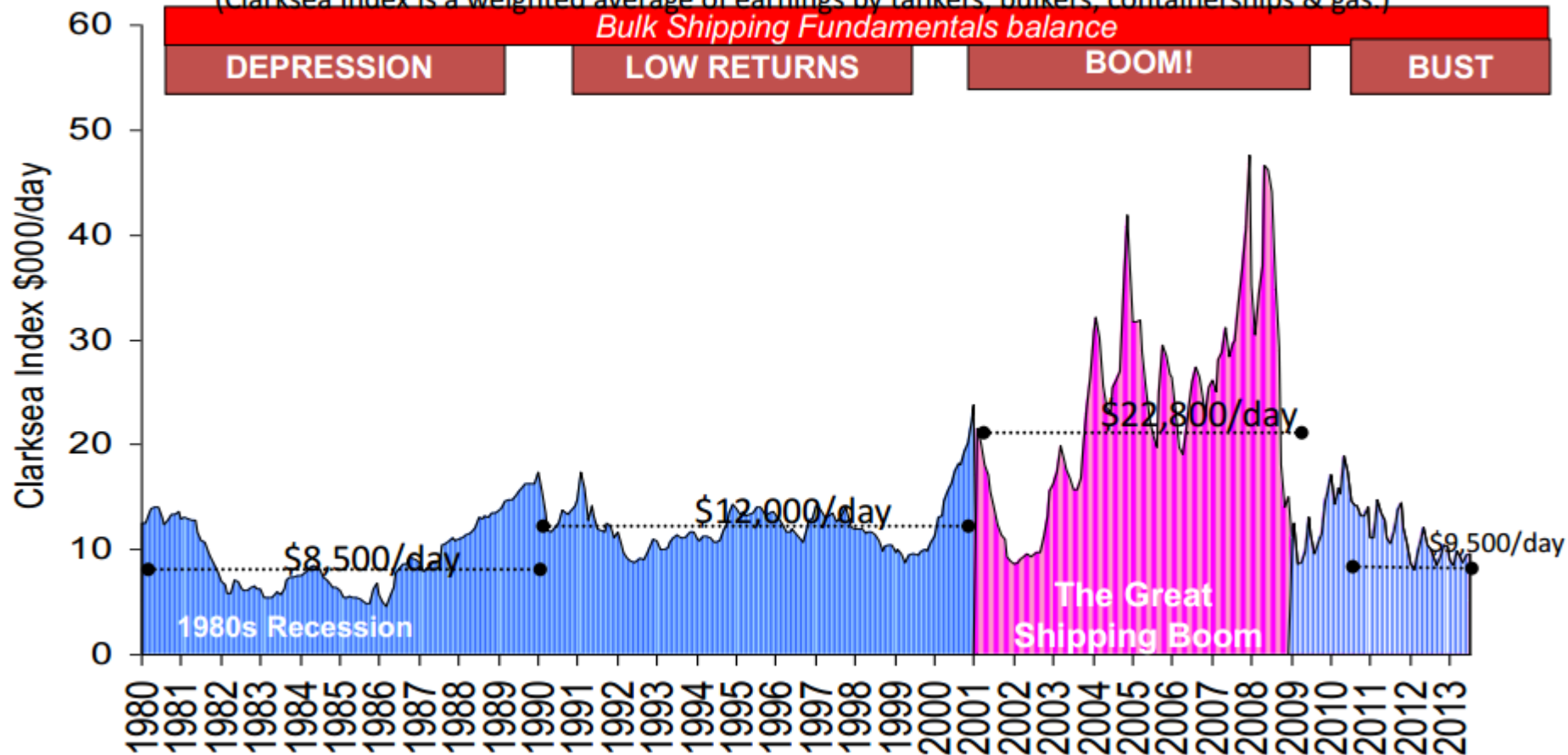


The actual risk exposure?



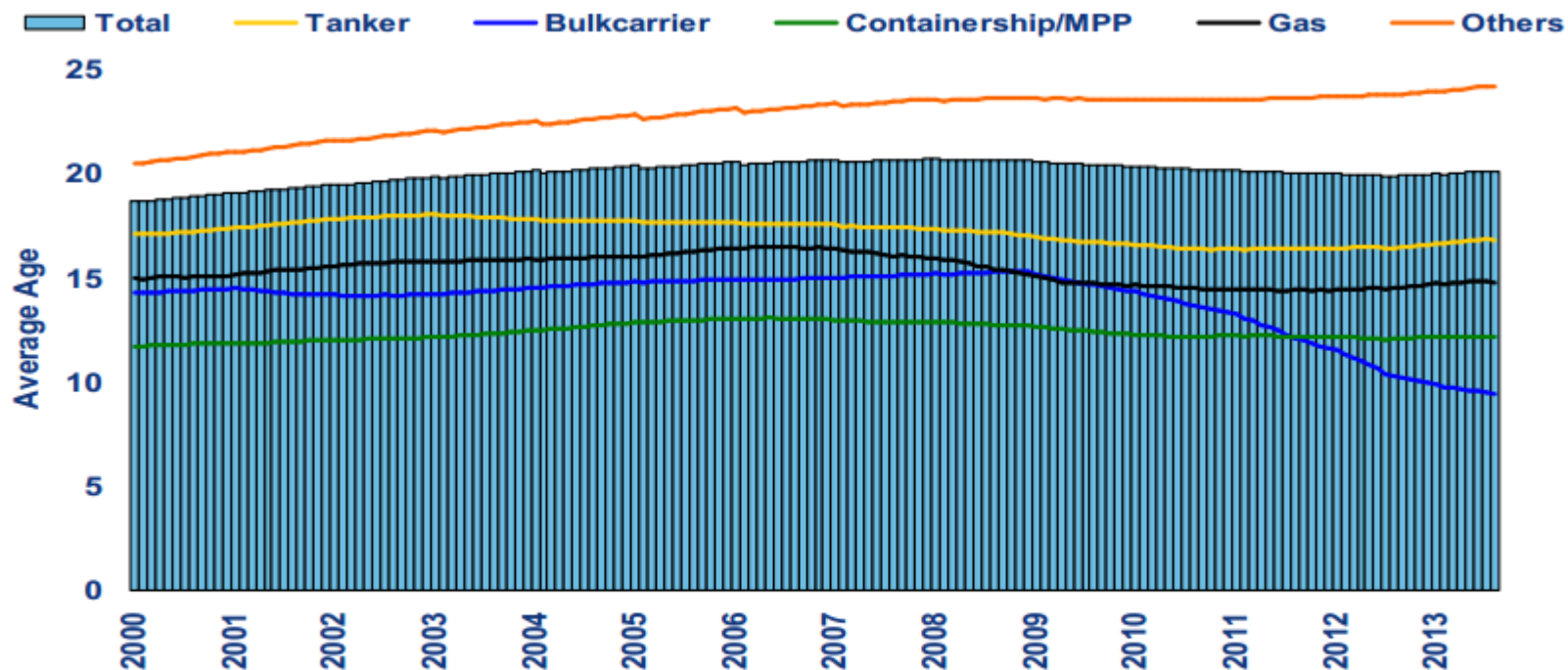
Ship Earnings Super-Cycle

(Clarksea Index is a weighted average of earnings by tankers, bulkers, containerships & gas.)



Source: Clarkson Research Services Ltd

Average Age of the World Fleet 2000-2013



Source: Clarkson Research, August 2013.



Financial impact of Sandy

- Estimated economic loss:
\$ 65 billion
- Estimated insured loss:
\$ 25 to \$ 30 billion
- Largest Marine loss in history:
\$ 2.5 to 3.5 billion



Sandy marine losses

- \$ 2.5 to \$ 3.5 billion
- “Wiped out entire U.S. Marine premium for 2012”
- Marine 1% of total premium but 10% of Sandy losses

(Source: Insurance Journal - March 22, 2013)



Sandy marine losses

- **Cargo loss estimated at \$ 1 billion**
(Source: Cargo Business Newswire, November 5, 2012)
- **Cargo automobile \$ 650 million**
(Source: Insurance Insider, December 12, 2012)
- **65,000. Boats / Yachts Damaged (50% insured), estimated insured loss \$ 650 million**
(Source: Boat US)
- **Fine Arts \$ 500 million**
(Source: Property Casualty 360, December 21, 2012)
- **Specie / Valuable Papers: Depository Trust and Clearing House (DTCC) Bearer Bonds face value \$ 70 billion, recovery / restoration costs much less**
(Source: NY Post, November 18, 2012)



Scale of Sandy's impact

Port Equipment / Cargo Damage Impact

- 15,000 TEU of loaded containers sustained damage
- 16,000 + autos lost
- 3,000 truck chassis total loss
- Over 100 miles of rail cars and chassis damaged
- Massive loss / damage to empty containers (extreme in private, independently owned facilities not under the jurisdiction of the Port / USCG)



Scale of Sandy's impact

Port Equipment / Cargo Damage Impact

- Widespread salt water damage to cranes, lists, straddle carriers, pumps, etc. (temporary repairs affected but long term replacements likely needed due to post corrosive damage from salt water)
- Entire fleets of trucks damaged / total loss
- Cargo control systems, electronic inventory systems a total loss



Cargo losses

- Containerized Cargo
- Automobiles
- Bulk Cargo
- Project Cargo / Large Break Bulk
- Warehouse / Storage / Distribution Centers
- Retail Stock Through-Put



Other marine losses

- Marinas (Piers / Wharves / Docks, Contractor's Equipment, Property)
- Boat Dealers (Inventory, Contractor's Equipment, Property)
- Port Installations / Equipment
- Hull & Machinery / Protection & Indemnity
- Marine Liabilities (Contractual Liability)



The Human Contribution to Marine Casualties - trends observations and solutions

Karl Lumbers

Risk Management Director

UK P&I Club



1\$m + Claims - Main Cause of claim

33% Deck officer error

14% Pilot error

12% Crew error

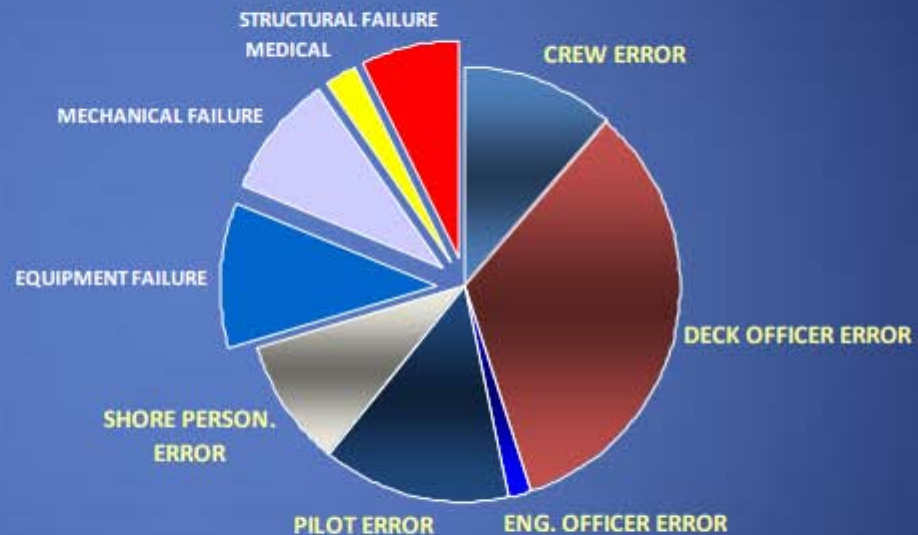
11% Equipment failure

9% Shore person error

9% Mechanical failure

7% Structural failure

3% Medical



Human error dominant over last 26 years



1\$m + Claims - Main Cause of claim - Trend

1987 -1997



2002-2011



Human error still as influential as when we first looked at it in 1987 but slightly different emphasis



Removal of wreck - an increasing challenge for insurers

Mike Kelleher

Director,

West of England Insurance Services, London



20 MOST SIGNIFICANT CASUALTIES

Year	Vessel name	Type	Club	GT	Containers On Board	Gross Incurred (USDs)	ROW/Scopic (USDs)
2002	TRICOLOR	Ro Ro	Gard	49792		72,056,112	54,775,816
2004	HYUNDAI NO 105	Car Carrier	UK	40772		67,711,237	56,087,761
2004	SELENDANG AYU	Bulk Carrier	Swedish	39775		167,654,495	147,463,633
2005	CP VALOUR	Container	WoE	15145	900	48,302,427	44,553,142
2005	TWIN STAR	Bulk Carrier	Japan	14437		38,242,593	33,751,367
2006	OCEAN VICTORY	Bulk Carrier	WoE	88853		61,933,712	52,285,246
2006	ROKIA DELMAS	Container	Swedish	33047	391	89,250,000	73,284,457
2006	GIANT STEP	Ore Carrier	Japan	98587		58,608,823	38,887,613
2006	CALIFORNIA	Bulk Carrier	American	40182		43,812,522	43,670,308
2006	MSC NAPOLI	Container	London	53409	2,318	193,684,930	135,301,307
2007	NEW FLAME	Bulk Carrier	Swedish	26824		180,016,513	177,372,321
2007	SEA DIAMOND	Passenger	WoE	22412		85,860,517	58,055,913
2007	EASTERN BRIGHT	Chemical Tanker	Japan	1715		65,763,686	58,513,986
2008	FEDRA	Bulk Carrier	American	35886		66,162,281	60,707,280
2010	JOLLY AMARANTO	Ro Ro	UK	22945		84,954,388	45,328,265
2010	MSC CHITRA	Container	Standard	33113	1,219	114,500,000	102,474,886
2011	B OCEANIA	Bulk Carrier	Swedish	38337		77,123,847	75,845,785
2011	RENA	Container	Swedish	37209	1,366	350,000,000	304,300,405
2011	COSTA CONCORDIA	Cruise Ship	Standard	114147		1,169,256,988	944,630,508
2012	BARELI	Container	Gard	35881	1,397	95,022,816	53,916,284
					TOTAL	3,129,917,887	2,561,206,283



FOCUS OF THE REVIEW

- Key factors identified:
 - Physical Factors - Location / Water depth / Wreck situation / Response equipment and mobilisation / Weather
 - Contractual arrangements – Contract forms used
 - Performance of Salvage teams and SCR's in attendance
 - Bunker Removal – quantities removed, time taken and cost analysis
 - Incidents involving loss of containers – particular consequences
 - Impact of Government / other authority intervention and/or interference in operations



Broader Market Place Trends

- Over supply of capital
- No investment income
- Flat economics in the developed world
- Increasing values in the developing world
- Increasingly concentrated distribution channel



More Challenging Macro Environment

- Depressed economic conditions:
 - Lower maintenance budget due to reduced earnings
 - Ships under utilised go for repairs > increase in moral hazard/Layups
 - Lower freight rates > reduced asset values > increased CTLs
 - Increasing trend to claim in recessionary environment
 - Minimal investment return, higher credit risk and weakening currencies
- Crew competence has not kept pace with growing world fleet



Emerging Issues

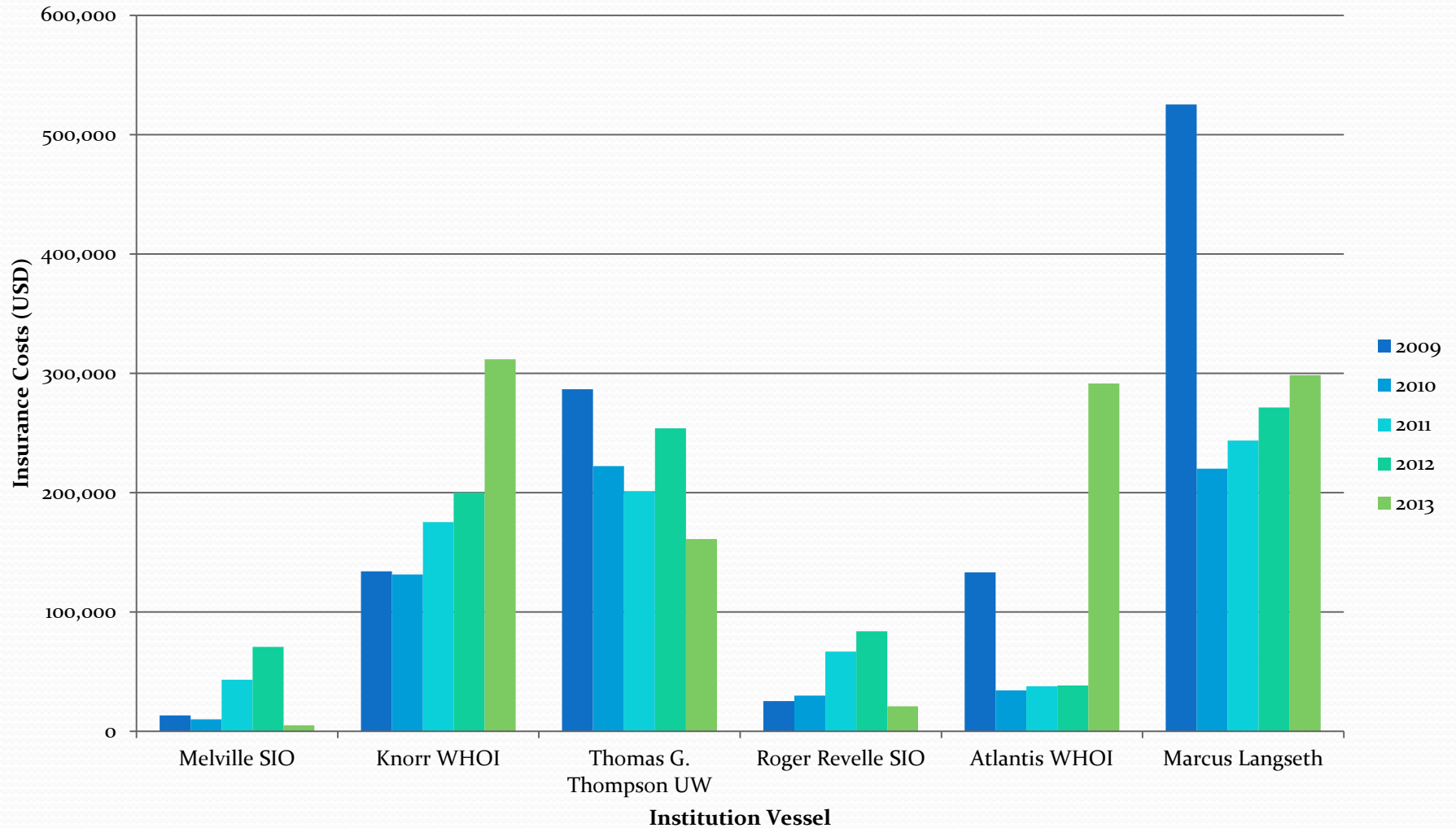
- Increasing claims trends – frequency and severity
- Increasing:
 - Cost of litigation e.g. GA/salvage awards
 - Environmental regulation
 - Sanctions compliance (e.g. reputational risk)
- Changing trading patterns e.g. Arctic shipping lanes, Northern Sea routes
- Crew competence/Bridge management/Vessel maintenance/Port congestion
- New technology



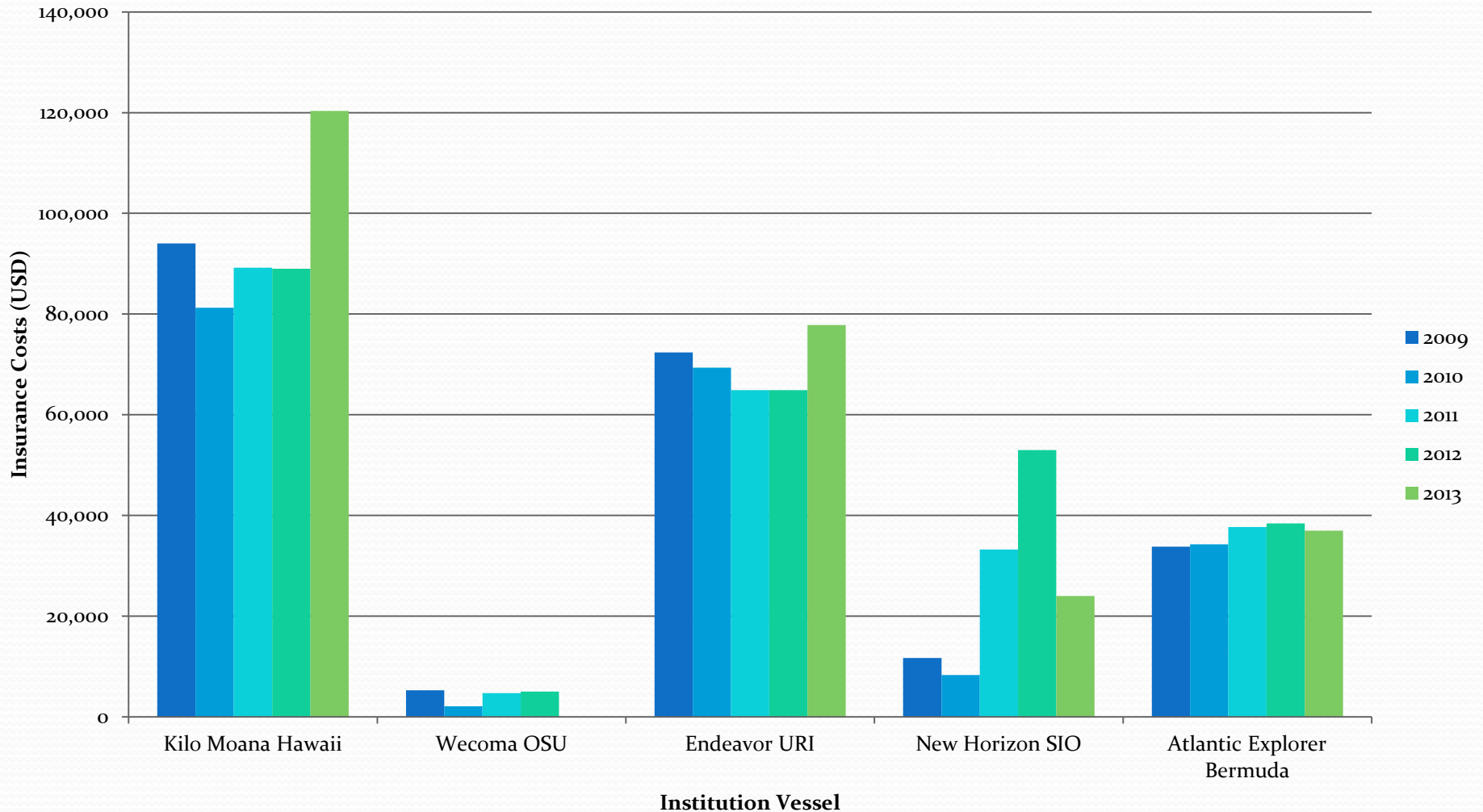


UNOLS Insurance

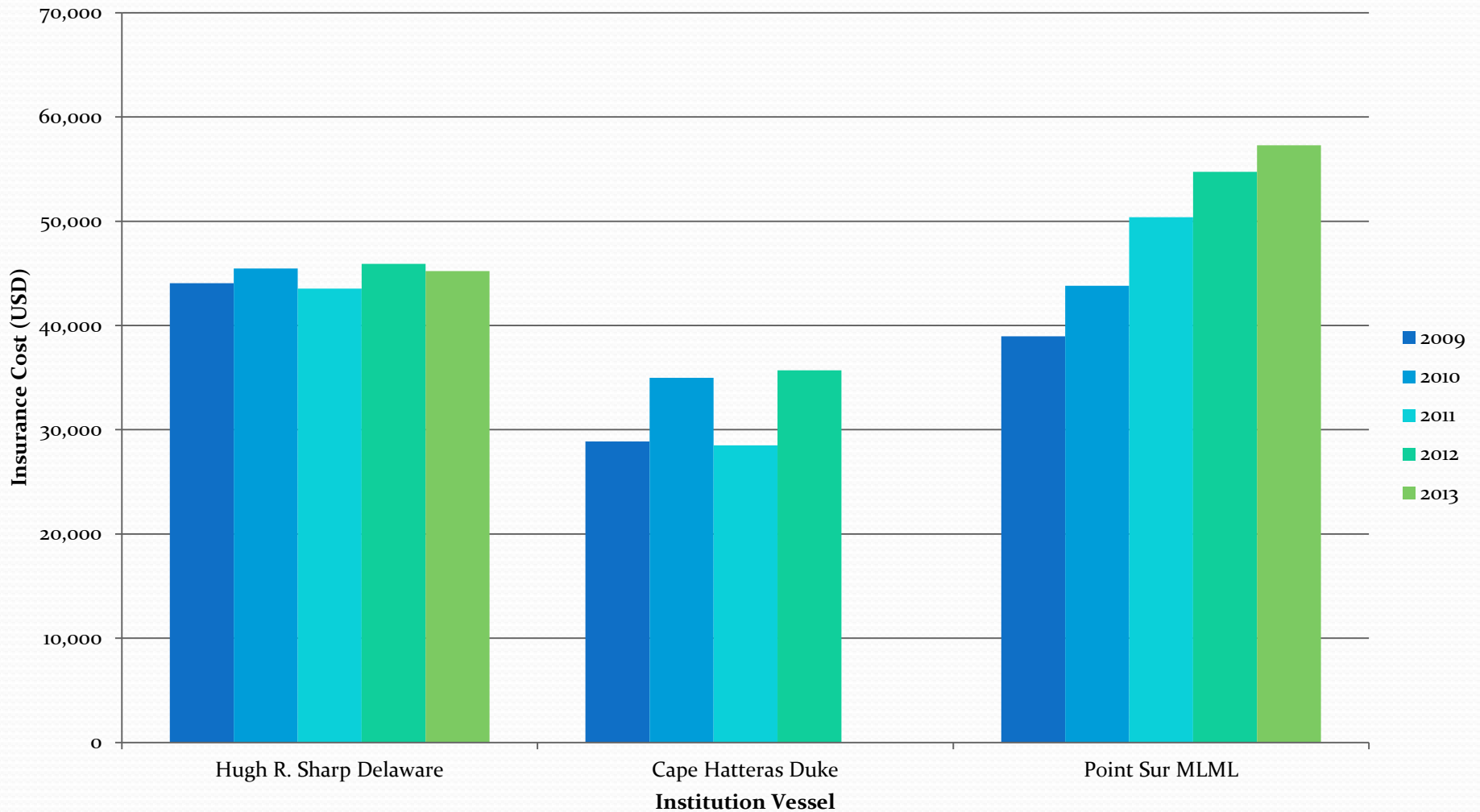
2009-2013 Insurance Costs: Global/Ocean



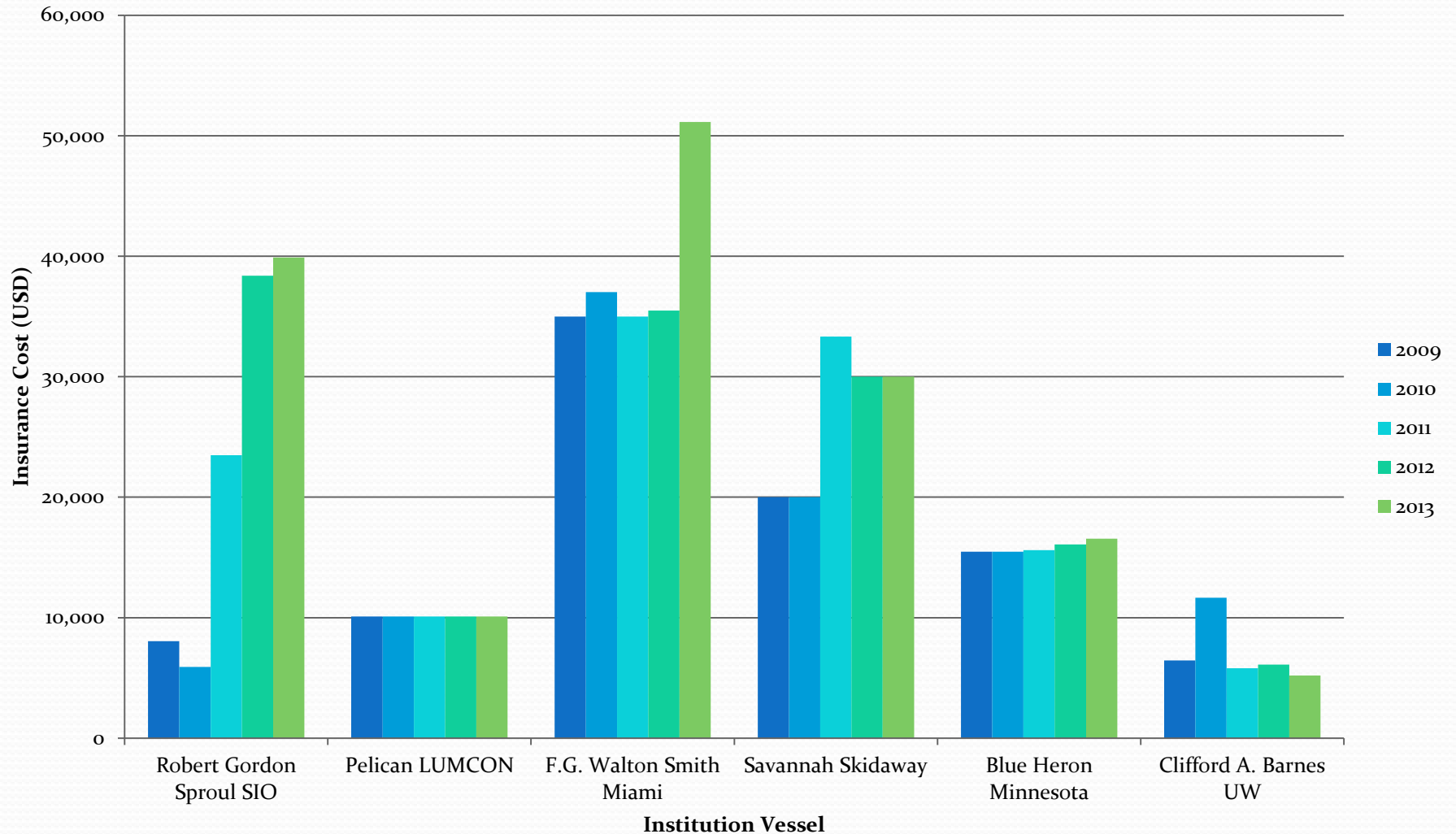
2009-2013 Insurance Costs: Ocean/Intermediate



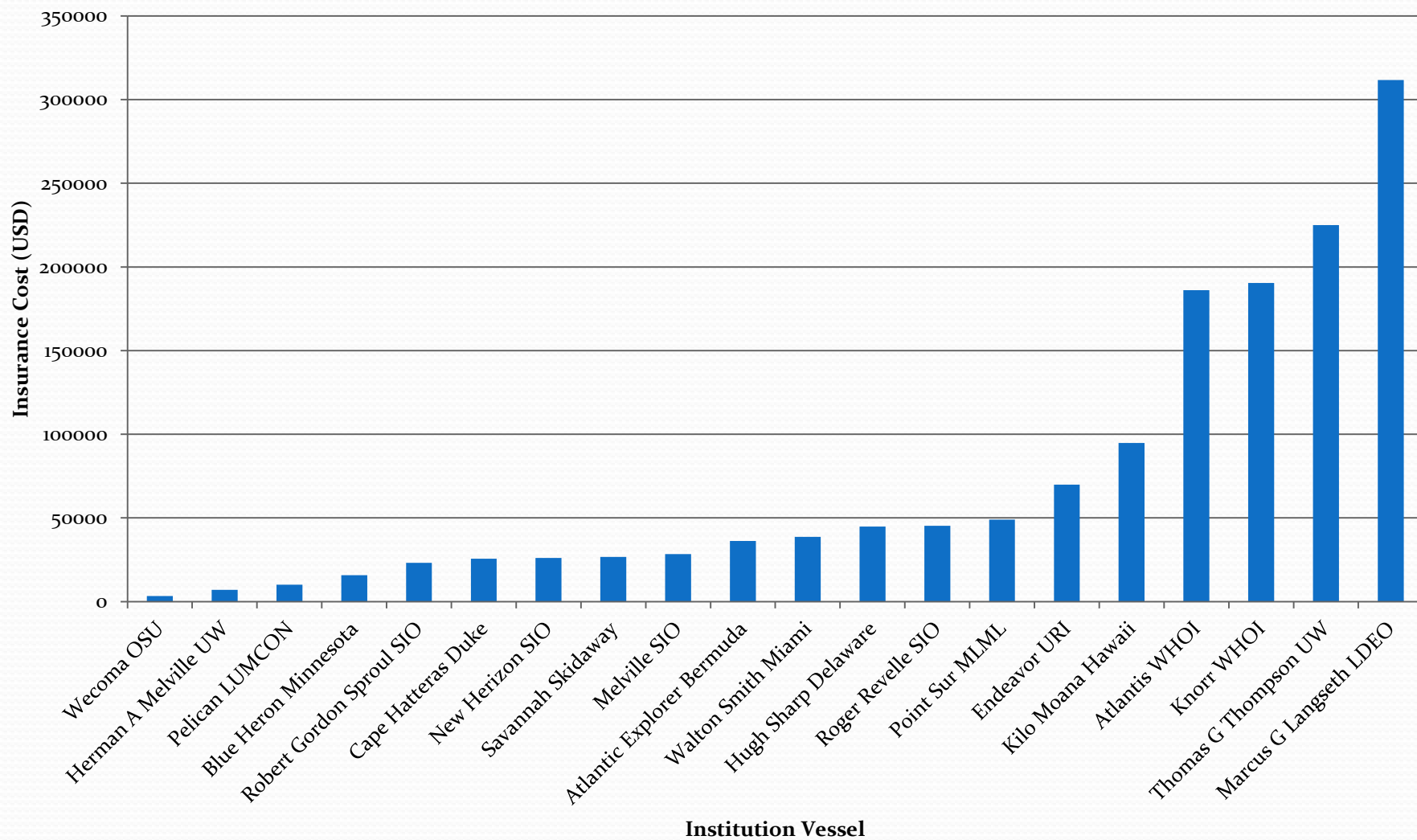
2009-2013 Insurance Costs: Regional



2009-2013 Insurance Costs: Coastal/Local



2009-2013 Insurance Costs: 5-year Averages





Research Vessel News

India launches new Research Vessel



Image: <https://worldmaritimeneews.com/archives/62547/>

- ABG Shipyard has launched Indian built oceanographic research vessel 'RV Sindhu Sadhana', from the Indian state of Gujarat.

Russia launches new Research Vessel



Image: <https://worldmaritimeneews.com/archives/62547/>

- Russia has launched a new oceanographic research vessel *RV Yantar* from JSC Yantar Shipyard in Kaliningrad on the Baltic Sea.

A Sea Change for U.S. Oceanography

Eli Kintisch

Marine scientists are confronting declining budgets and a shrinking from new technologies remake their field.

Since 1996, oceanographer Kipp Shearman has relied on a duo known around the lab as Bob and Jane to measure chlorophyll and other environmental parameters in the ocean off the Oregon coast. Roaming the sea for 3 to 5 weeks at a time, the pair never complains and comes up for air just every 6 hours. They're 2-meter-long automated submersibles called gliders, and the reams of data they've collected have allowed Shearman's team at Oregon State University, Corvallis, to make novel insights into changing marine ecosystems.

The gliders are cheaper than sending scientists out in ships to make measurements, Shearman says, and they can remain at sea nearly indefinitely. He named the machines after some senior colleagues, and, "We kid them that we're replacing them with robots."

Image: <http://www.sciencemag.org/content/339/6124/1138.full>

U.S. Science Fleet's Future Is Far from Shipshape

The federal oceanographic fleet could be reduced to half its size by 2026, barring major investment

By Daniel Cressey and Nature magazine

They already have to contend with cruel seas and crueler grant reviewers, but American marine scientists may face an even bigger problem: barring major investment, the federal oceanographic fleet is going to be down to half its current size by 2026.

At the end of May, the White House released [an assessment](#) of the vessels run by its various agencies for research and survey work. It shows a fleet battered by multiple issues. Government pressure on budgets has led to a number of ships being sold or mothballed, staffing costs have increased and fuel costs for research ships have risen fourfold since 2003.



[Pin it](#)

The icebreaker *Nathaniel B. Palmer* of the U.S. Antarctic Program is part of a rapidly shrinking fleet.

Image: Holly Gingles, National Science Foundation

Image: <http://www.scientificamerican.com/article.cfm?id=us-science-fleets-future-is-far-from-ship-shape>

Sailing for Science

Survey and research fleet seeks knowledge of world's oceans, but requires recapitalization

By Edward Lundquist

A new report by the National Ocean Council, the Federal Oceanographic Fleet Status Report, notes the challenges faced by operators of the United States fleet of survey and research ships.

"These 47 ships are part of our Nation's critical infrastructure, collecting vital information to help protect lives and property from marine hazards; measure and project global climate change and ocean acidification; enhance safety and security and more." Retired Navy Capt. Edward Lundquist talked to several key stakeholders in the Federal Oceanographic Fleet to get a sense of where the fleet is today, and what the future holds. His report summarizes his conversations with the National Science Foundation (NSF); Office of Naval Research (ONR); National Oceanic and Atmospheric Administration (NOAA); and University of California-San Diego's Scripps Institution of Oceanography (SIO).

ships in CY14-15. The NSF-funded arctic research vessel Sikuliaq will replace the R/V Alpha Helix that was retired at the end of 2006.

The two biggest cost drivers, fuel and manpower, account for two thirds of the operating costs. According to NSF's Rose Dufour, program director for the Ship Operations Program, one third of the cost is for fuel alone, and another third is for crew and shore support. "It's increasing ahead of inflation and exacerbating our level-funding situation."

Newer ships, Houtman said, are technologically more capable and are more efficient. "The cost to get a ship to sea is not going down. Operating costs for the fleet are going up faster than our budgets."

Houtman said an interagency working group continues to look very carefully at how the federal agencies can share the ships that are in the fleet. "If a funded science research cruise

Robotic Boat Hits 1000 mile mark in Transatlantic Crossing



Image: <http://spectrum.ieee.org/automaton/robotics/diy/robotic-boat-hits-1000-mile-makr-in-transatlantic-crossing>

Woman Busted While Trying to Steal Scripps Research Ship

BY MIKE SCHULER ON APRIL 10, 2013

 Like  132  20

A woman was taken into custody by the San Diego Police Dept. Tuesday after trying to steal a research ship belonging to the Scripps Institution of Oceanography.

According to local reports, the woman hopped the fence at the Scripps facility at about 2 a.m. Tuesday and was caught red handed

by security guards while trying to release the mooring lines of the 120-foot New Horizon while scientists were asleep inside. When confronted, the woman allegedly said she was trying to sail to the east coast.

Police later said the woman was mentally unstable and she was turned over to the County of San Diego Mental Health. No charges are expected to be filed.

The New Horizon is used for research by Scripps Institution of Oceanography and the National Oceanic and Atmospheric Administration.

Image: <http://gcaptain.com/woman-busted-while-trying-to-steal-scripps-research-ship/>



RV New Horizon via Scripps

French Research Vessel rescues Syrian Refugees



Image: http://en.wikipedia.org/wiki/RV_Le_Suroit

- French oceanographic research vessel *Le Suroit* rescued 29 Syrian refugees off the coast of Italy on October 7th.

Canadian Arctic Helicopter Crash



Image: <http://www.theglobeandmail.com/news/national/race-against-weather-to-retrieve-sunken-chopper-from-frigid-arctic-waters/article14492733/>

- Salvage operation has started on the Canadian helicopter that crashed in the Northwest Territory on September 9th.

Electrical Fire Aboard *Dorado Discovery*



Image: <http://www.rovworld.com/article5003.html>

- RV *Dorado Discovery* operated by Oydyssey Marine Exploration had a two-alarm electrical fire break out on board while docked in San Diego on October 6th.

RV Dorado Discovery Ship Specifications



Principal Features	
Official Number	916647
Port of Registry	Leith, UK
Class Number	952C44
Call Sign	ZDJU3
Gross Tonnage	5099.00
Net Tonnage	1529.00
IMO Number	8715156
Type	DP Research
Built	Gdansk - 1997
Length Overall	100m
Breadth	18.00m
Depth	7m
Fuel Survey	7.0 tons/day
Fuel Use Port	1.5 tons/day
Fuel Use Cruise	10.0 tons/day
Navigation Equipment	
Radio	Full GMDSS
Radar	21X7 ARPA (X band) 28X7 ARPA/AIS (X band + S band)
Communication	Inmarsat F 77 Networked VSAT
Gyro	Anschutz ST022
Autopilot	Robertson AP9 MII
Echosounder	Atlas Electronic 481 Digigraph
GPS	2 x Furuno 150 2 x Simrad MX 150
Plotter	1 per radar unit
Weather Fax	Furuno 208
AIS	JRC (JHS-180 AIS)

Machinery	
Main Engines	1 MAN B&W 8L35 MC Cogelsiki
Horse Power	3680 Kw
Auxiliary Power	6 x Sulzer 677 Kw 1 x Shaft 1500 Kw
Bow Thruster	1 Zarnok 250 KW
Azimuth Bow Thruster	1 Brevetti A/S 800 Kw
Stern Thruster	1 Brevetti A/S 700 Kw
Propeller	1 CPP + 1 Nozzle
Rudder	1 Flap
DP System	Emri JS/DP
Fuel Capacity	MGO 768 m³
FW Capacity	220 m³ + 8m³/Day
Accommodations	
Cabins	42 Single + 6 Double
Messroom	Steward served
TV Lounge	2
Climate Control	Full A/C and Heating
Safety Equipment	Full SOLAS for 54

Contact Information

Roy Truman
Senior Vice President
Odyssey Marine Exploration
+1-813-830-6584 (Office)
royt@shipwreck.net

John Longley
Vice President
Odyssey Marine Exploration
+1-813-314-2696 (Office)
jlongley@shipwreck.net



Lifting Gear	
Sidbl Fwd Crane SWL	2,500 kg
Port Fwd Crane SWL	3,200 kg
Sidbl Aft Crane SWL	3,000kg
Port Aft Crane SWL	4,000 kg
RCOV Knuckle Crane	10,000 kg
Stern A Frame Central Lifting Point Static SWL	35 tons
Stern A Frame Central Lifting Point Dynamic	35 tons
Stern A Frame Port Lifting Point	15 tons
Stern A Frame sidbl Lifting Point	15 tons
Helldeck	Requires Cert
MOB Boat	6 Person

Features	
Survey, Geological, Exploration, Technical and Scientific Labs	
Large Refrigerated/Freezer Sample and Core Storage	
Dedicated Geological Sample Laboratory	
Water Chemistry Lab	
Electrical, Mechanical, Welding and Fabrication Shops	
High Speed Internet Access	
Multimedia Equipped Conference/ Briefing Room	
Recreational Lounges and Gym	



Image: <http://www.odysseyminerals.com/documents/RVDoradoDiscoveryShipSpecifications7.12.pdf>

October 15, 2013

[Update] Detained Ship & Crew Freed by Venezuela

BY MAREX



Image: <http://www.maritime-executive.com/article/Update-Venezuela-Guyana-to-Meet-Over-Detained-Ship-Crew-2013-10-15/>

Canadian Navy's Only Research Vessel Docked Indefinitely



- *Quest* is docked in Halifax due to funding cuts.

Image: <http://www.cbc.ca/news/canada/nova-scotia/cfav-quest-navy-s-only-research-vessel-docked-indefinitely-1.2519695>

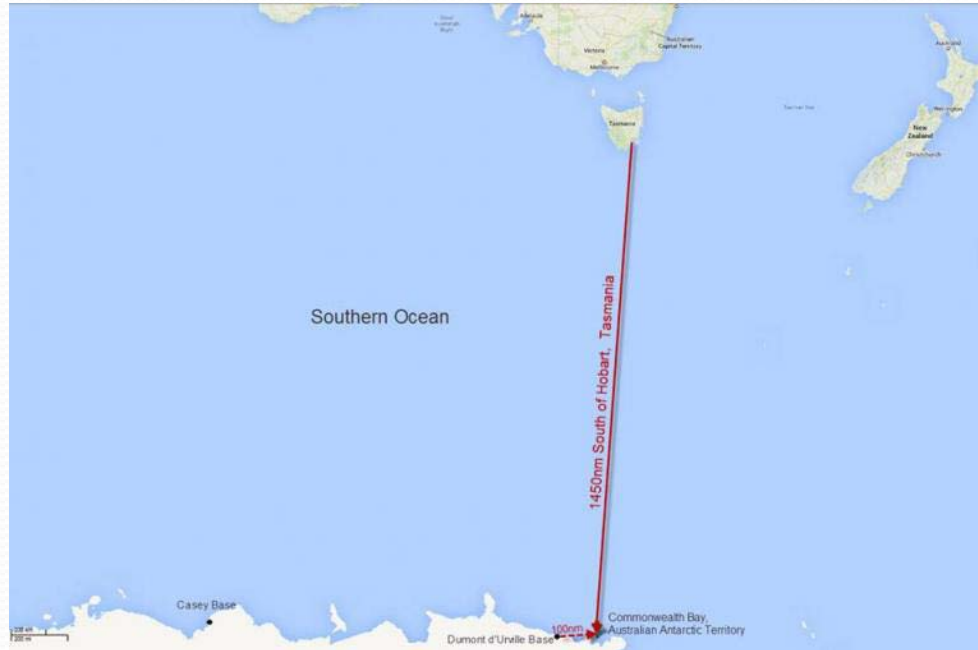
Kenya launches first Research Vessel



- The 3.5 billion shilling *R/V Mtafiti* was a gift from Belgium and launched from Mombassa on January 27, 2014.

Image: <http://www.fountainnews.co.ke/wp-content/uploads/2014/01/mtafiti.jpg>

Australia Rescues Russian Research Vessel Passengers from Antarctic Ice



- The 52 passengers of *Akademik Shokalskiy* were rescued by Australian icebreakers on 22 January after getting stuck in Antarctic sea ice around Christmas.

Image: http://si.ibtimes.com/sites/www.ibtimes.com/files/styles/v2_article_large/public/2013/12/26/commonwealth-bay.jpg

Research Vessels at South Georgia Island



- SA Agulhas II, US R/V Ronald H Brown, RRS Ernest Shackleton, and HMS Protector continue Antarctic Research efforts in the South Sandwich Islands.

<http://en.mercopress.com/2014/02/21/south-georgia-research-vessels-season-three-were-active-in-january-plus-hms-protector>

Coastal Carolina University to Christen New Vessel *Coastal Explorer*



- CCU's 50-foot aluminum research boat, with a 500-mile range and 6 work stations, will contribute to research projects at the school.

<http://www.myrtlebeachonline.com/2014/03/13/4092058/ccu-to-christen-research-vessel.html>

Medevac Rescues Doctor 190 Miles off Galveston



- Flight mechanic on his first medevac call rescues doctor from Norwegian research vessel *Veritas Viking*.

<http://www.dvidshub.net/news/121374/flight-mechanics-first-medevac-rescues-doctor-research-vessel-190-miles-off-galveston#.Uype2vldUnE#ixzz2wTDtSjrm>

Norwalk Maritime Aquarium Names New Vessel *R/V Spirit of the Sound*



<http://www.flickr.com/photos/maritimeaquarium/12776696994/in/photostream/>

NSF's R/V *Sikuliaq* Completes Preliminary Trials in Icy Great Lakes Waters



- NSF's 261-foot R/V *Sikuliaq* will be operated by the University of Alaska at Fairbanks School of Fisheries and Ocean Sciences after completing testing.

http://www.nsf.gov/news/news_summ.jsp?cntn_id=130816

Vessel Accident Near Betty's Bay



- One person drowned before rescue workers were able to help when a research vessel ran aground.

<http://ewn.co.za/2014/02/27/Vessel-accident-at-Hout-Bay>



Relevant Legal Cases and Issues

McBride v. Estis Well Service, LLC

- Involves the issue of “punitive damages” for injuries to seamen under the doctrine of unseaworthiness – previously not available
- Here the court for the first time said they were permissible and could equal compensatory damages
- Decision likely to be appealed, but is one more reason why American tort law makes operation of a vessel so expensive

Satellite Pollution Prosecuted

- Maersk Kiera detected pumping oil within 12 miles of the U.K. by a satellite operated by the European Maritime Safety Agency
- Owners admitted guilt when confronted with the evidence and paid a fine of 22,500 pounds.
- First time satellite imagery was used as primary evidence in a maritime prosecution case brought by the Maritime and Coastguard Agency.

Navy Test Range Lawsuit

- Defenders of Wildlife v. US Dept. of Navy (10/1/13)
- 12 environmental groups sued to block the Navy's development of an Undersea Warfare Training Range 50 miles off the Florida/Georgia coast in waters adjacent to the only known calving grounds of the endangered Northern Right Whale (only 300 remain)
- Navy's position was upheld on technical grounds, but will later have to provide incidental take information before becomes operational in 2018.

Whale Stranding Linked to Sonar

- 100 melon-headed whales stranded in 2008 in a shallow Madagascar lagoon.
- An independent review panel appointed by the International Whaling Commission concluded that a multi-beam echosounder system used by an Exxon-Mobil contractor was “the most plausible and likely behavioral trigger” for the stranding. About 75 of the animals, normally found in deep waters, died.
- Exxon-Mobil, which partially funded the research did not accept responsibility “in light of the uncertainties in the report”

Top Ten Personal Injury Awards

- 1. Nelton – felt pop in neck while pulling wrench; total awarded > \$1.2 million
- 2. Grab – while piloting crew boat, allided with survey tower, put face through windshield; awarded \$1.2 million, reduced 50% for comparative negligence
- 3. Benson – seaman hit in his back by the headache ball; awarded \$185,000
- 4. Ledet – towing wire slipped and knocked seaman unconscious; awarded \$1.8 million
- 5. Owens – back gave out while trying to lift mud hose; awarded \$850,000

- 6. Martinez – while using sledgehammer to break a winch pin, felt pain in neck; awarded \$225,000
- 7. Caesar – seaman fell between dock and vessel while boarding; awarded \$330,000 for shoulder and back
- 8. Moore – cook fell into freezer after milk crate she was standing on fell over; awarded \$500,000
- 9. Easley – arm injured while handling docklines; awarded \$550,000
- 10. Campbell – seaman struck his own finger while using sledgehammer; awarded \$1.5 million

Conclusions

A year of significant change in the research vessel fleet

Relatively stable insurance market, despite Sandy and Costa Concordia

Highly variable UNOLS insurance costs raise the question once again of the viability of a group program

The expense of personal injury awards continues to rise, and the potential for punitive damages makes the future even more daunting

Questions?

