

## HEAVY LIFT VESSELS - 1



"Blue Marlin" (Dockwise) carrying Defence equipment

"Blue Marlin" carrying USS "Cole"  
(after the terrorist attack at Aden)



"Mighty Servant I" (Dockwise)  
carrying a semi-submersible  
production unit (Petrobras P36)



## HEAVY LIFT VESSELS - 2



She capsized while a GE  
generator was being loaded.

9.12.03 - Albany, NY - Dutch heavylift  
vessel "Stellamare" (Jumbo Nav.)



Three  
crewmembers  
died.



## A SPECIAL VESSEL



### **“Mayflower Resolution”**

A unique ship which can rise 100 foot (35 metres) out of the water on stilts.

The world's first turbine installation vessel : she will install wind turbines at sea, at the rate of one a day.



## A SPECIAL VESSEL - 2



14,547 GRT - Built in China in 2003 for Mayflower Energy Ltd. Flag: Isle of Man 130,5m long - 300t crane. Classed DNV. Crew: 34. With the erection team: 60/70 people. The vessel that has characteristics of a ship, a floating crane, a DP (\*) and self-elevating unit.

She can carry **10 sets of turbines**, foundations and equipment to install the turbines during **each 14-day trip**. At the same time, a ROV (°) will install the cables that go between the various turbines and connect the wind-energy field to the power grid.

As soon as she arrives at site, she is manoeuvred into place using **dynamic positioning**. She is then jacked clear of the water (one meter a minute) and turns from a ship into a completely stable working platform.



(\*) dynamic positioning

(\*) Remote Operated Vehicle



## HYDROGEN PRODUCTION SHIP

Lloyd's List - 5 Oct 2004

### **"Hydrogen Challenger"**

A former coastal tanker is being adapted in Bremerhaven for a new role as a wind plant-fitted, hydrogen production ship.

A mobile production platform offers the flexibility of positioning in regard to reliability of wind energy availability and strength. She has been fitted with two deck-mounted, vertical-axis wind rotors and integrated generators.

She will produce hydrogen and oxygen through electrolysis and then transport the cargo - in pressurized tanks - to industrial buyers on the German mainland. Scientific support has been provided by the University of Bremerhaven.



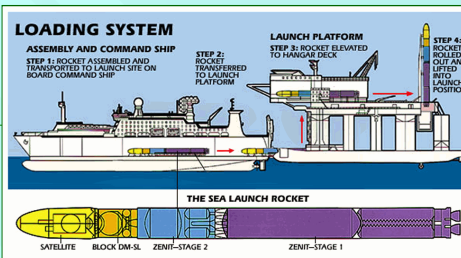
2016 - Currently operating in the German Bight or near Helgoland (where the most wind is) and docks in Bremerhaven where the hydrogen is delivered to the market.



## SEA LAUNCH



Reduced launch infrastructure  
Equatorial launch site: most direct route to orbit  
Customized launch location  
Heavy lift capability  
Cost advantages



### **The Partners**

Boeing, USA  
Kvaerner Group, Norway  
RSC-Energia, Russia  
SDO Yuzhnoye/PO Yuzhmash, Ukraine





## OTHER SHIPS



Cable-ship "Giulio Verne"  
(Pirelli, I)



Flo-Flo Barge Carrier



Crane vessel "Saipem 7000"  
(Italian, but Bahamas Flag) Crew: 400  
7,000t each crane. Speed: 32 knots  
The biggest in the world, of its type.

"Tempera" Double Acting Tanker (DAT) (tanker - ice breaker) (2002)  
Finnish design - Japanese construction. Revolutionary new class of aframax tanker, with 2 bow thrusters.



In  
normal  
seagoing  
mode



In  
icebreaking  
mode

## PLEASURE CRAFTS - 1



"Azzam" \$ 605m - Lürssen (D) 2013  
She belongs to the Emir of Abu Dhabi.

### THE MOST EXPENSIVE

"Eclipse" \$ 475m - \$ 1.2bn  
Blohm & Voss (D) 2010  
Includes a private submarine  
70 crewmembers  
Owner: Roman Abramovich.



"Dubai" / "Platinum 25" - \$ 350m  
1998-2006 - Blohm & Voss/Lürssen  
Owner: the Sheikh of Dubai

"Serene" \$ 330m.  
Fincantieri (I) 2011  
Owner:  
Yuri Scheffler (vodka king)



"Supervacht A" \$ 323m  
Blohm & Voss (D) 2008  
Owner: Russian billionaire  
Andrei Melchenko





## PLEASURE CRAFTS - 2

### THE MOST EXPENSIVE

"Streets of Monaco" - \$ 1bn - being built now



155m - crew 70 - marble staircases - library - cinema  
private beach - man-made lake - waterfall - go-kart track

## PLEASURE CRAFTS - 3



Main risks: Fire  
and, now, Terrorism



What should these pictures  
remind insurers of ?

Accumulation of risks



After Hurricane Katrina, 2005



## PLEASURE CRAFTS - 4

Port Jebel Ali  
(outside Dubai)

unsuccessful  
loading operation  
of a yacht  
(value: US\$1.5m)



## PLEASURE CRAFTS - 5



### 2016, A LEAP YEAR FOR THE SUPERYACHT



"TheOne" and "Barbie", at Marmaris, Turkey,  
the largest yacht loss in 20 years (approx US\$50m)



Eight yachts at Abu Dhabi Yacht Club



"Moon" at Ras Al Khaimah



"Queen Anna" Ege Saray Marina, Turkey



## PLEASURE CRAFTS - 6

2017 - Cyclone Debbie

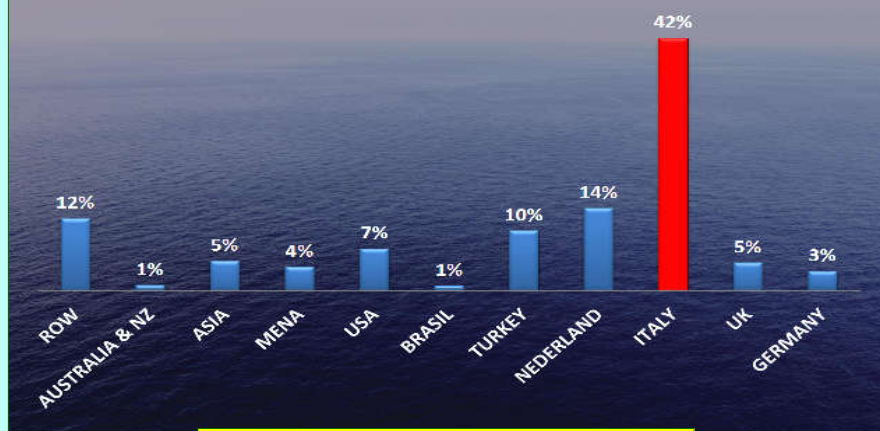


## PLEASURE CRAFTS - 7

Genova  
18-21 September 2016



### Superyacht 2016 global orders by Countries



A Marine Department might be of some use in Italy ...



## ENERGY PRODUCTION - 1

Power Buoy: it generates renewable energy through wave power



Wave roller farm



floating energy converter



## ENERGY PRODUCTION - 2 -

MailOnline

9th July 2013

Russia to use the first floating nuclear power plant in just 3 years to provide energy for hard-to-reach regions



A massive **Floating Nuclear Power Plant** is making its way toward its destination, after Russia's state nuclear corporation Rosatom launched the craft over the weekend. Called the "Akademik Lomonosov", it is being slowly towed out of St. Petersburg, where it was built. It will be brought to Murmansk, where its two reactors will be loaded with nuclear fuel and started up this autumn. From there, the power plant will be pulled to the Arctic port of Pevek, in far northeast Russia, where it will be wired into the infrastructure so it can replace an existing nuclear power on land.

Russian officials say the plant is to supply energy to remote industrial plants and port cities, and to offshore gas and oil platforms. The two reactor units can generate up to 70 MW of electric energy, enough to keep the activity of a town populated with 100,000 people.



The floating nuclear power plant should be online in 2019. It is designed with a great margin of safety that exceeds all possible threats and makes nuclear reactors invincible for tsunamis and other natural disasters."

Adapted from

MPRnews

30th April 2018



## A SPECIAL HULL

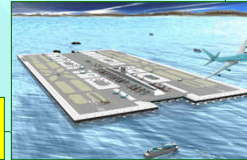
**Floating airport** (experimental) - in 2000  
South of Tokyo. 1,000 x 121 x 3m. 13 shipbuilders.  
It is also a disaster-prevention centre



(No longer in use)



Oct. 2009: plan to build a giant \$20 billion  
floating airport off San Diego, California.



## BUILDERS RISKS - 1



For a ship being built, we insure everything, from a simple hull plate to the handle of a 1st Class cabin.

Mainly static risks (as are, generally, those in Non-Marine) : **more control.**

Therefore: very desirable for a Marine Underwriter.

Risk of **accumulation**: in a building yard there may be 3 passenger ships of extremely high values.





## BUILDERS RISKS - 2



### **"Diamond Princess"**

(P&O Princess Cruises)

113,000 ton - US\$ 325,000,000

1-10-2002 Nagasaki. Fire at Mitsubishi Heavy Industries shipyard.

It could be the largest shipyard-related claim in history.

From "Lloyd's List" 9-10-2002

(my underlining)

Four mysterious fires occurred on the Diamond Princess ... between April and September ...

Mitsubishi Heavy Industries did not report the incidents to the police ... because damage was insignificant, although the company stepped up security ...

In two of the four incidents, what appeared to be remnants of solid fuels, not usually used in shipbuilding, were found on the sites .....



April 2003: payout expected to be \$275m

## MARINA OPERATORS



- **Installations** (piers, wharves, buildings, contents (fire, explosion, vandalism, collision of land vehicles, contact with aircraft or object falling therefrom, etc.)
- Robbery or **theft** (theft, infidelity of employees, valuables, etc. )
- **Mobile equipment**
- **Floating equipment** (owned auxiliary/service boats)
- **Liabilities** (including injury and loss of life) :



- general third party liability
- marina operators liability
- boat repairers liability





## SALVAGE - 1

**“Express Samina”** (534 passengers and crew)

She sinks rapidly after hitting rocks near the island of Paros in Sept. 2000: 82 dead.

The ship, built in 1966, had a poor reputation as a "rust bucket". The crew were accused by survivors of not being on watch at the time the ship ran into the island, marked by a lighthouse.

Nov. 2000. The vice-president of the company - who was discussing the tragedy in his sixth-floor office in the port of Piraeus - suddenly opened the window and jumped.

The Greek government withdrew the operating licences of 65 ferries - almost half the domestic fleet - for failing safety inspections.

Four months later all but seven of those ships were back in operation.



## SALVAGE - 2

Hawaii - Feb. 9, 2001 : The Japanese research vessel **“Ehime Maru”** is hit as the attack submarine **“USS Greeneville”** demonstrated emergency surfacing procedures.

Of 35 people on board, 9 are missing.



US taxpayers will have to foot **one of the most expensive salvage bills** in history.



Nov. 2001: operation concluded at a cost of **\$ 60,000,000** plus other disbursements.





## SALVAGE - 3

Moscow paid \$65m for the delivery of the **"Kursk"**.

Barents Sea



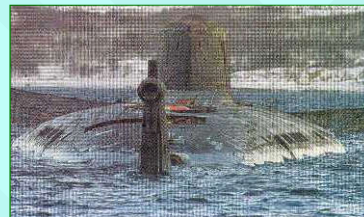
The damaged bow is cut



### Mammoet-Smit International

October 2001: **"Kursk"** delivered at Murmansk by pontoon "Giant-4" (LR 100A1), supported by 2 sub-pontoons

2002: the Kursk in dock at Roslyakovo



2002 : The sinking of the nuclear submarine in the Barents Sea last August was due to an explosion in one of the torpedoes and NOT, as had first been reported, to a collision with a submarine.



## SALVAGE - 4

From **"International Tug & Salvage"** - March/April 2005

### Salvors may refuse to assist casualties says ISU



According to the International Salvage Union, salvors may be deterred from offering assistance to vessels threatening pollution.

Commenting on the European Parliament's recent decision in favour of criminalising marine accidents, special advisor Michael Lacey told the ISU associate members meeting in London that salvage companies could well hold back from intervening in EU waters if there is an actual or possible escape of oil.

"Salvors may refuse to assist casualties without guaranteed immunity from the Coastal State and neighbouring Coastal States", he warned.  
(my underlining)



Sometimes politicians don't realize how much damage they can do





