DNV-GL

MARITIME

Class Society Remark - MARINE BOARD FALL MEETING

Washington DC

Helge Hermundsgard, Director Global Cruise Centre October 29th 2014

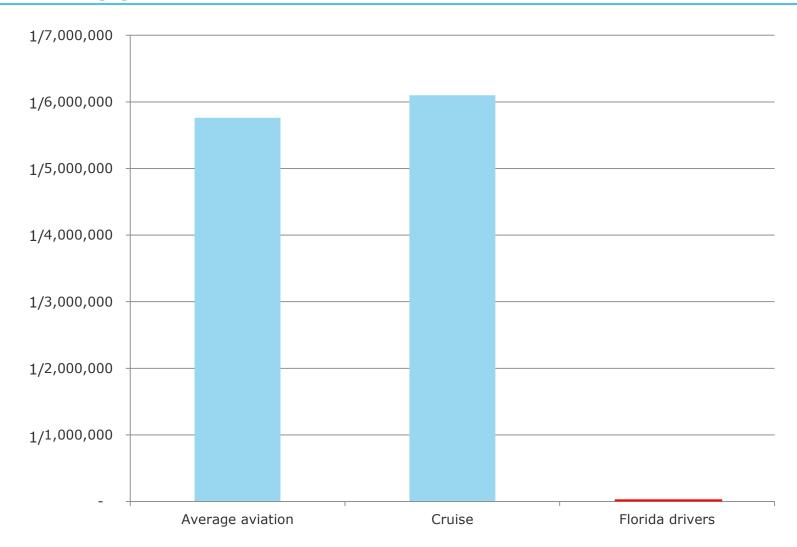
Safety Introduction and Basics

- Framing question:
 - Are current cruise ship safety industry initiatives sufficient or is more legislation/regulation necessary either from the U.S. or the IMO?

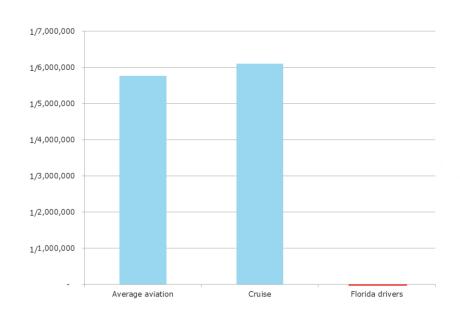


Are the initiatives sufficient? Is more regulation necessary?

Safety performance benchmark



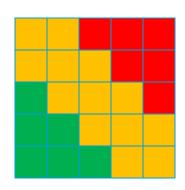
Can we be satisfied?



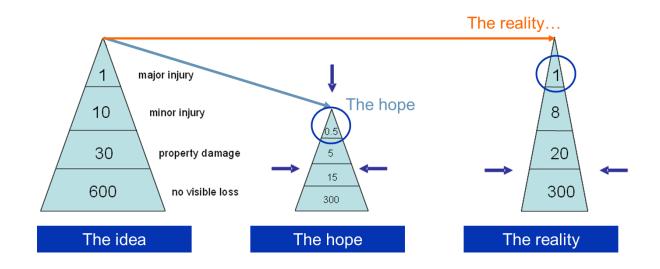
- Can we be satisfied:
 - No there is always ways to improve!
- We see significant initiatives in the industry
 - Is it sufficient?
 - Difficult to answer
 - Here I would like to use Sir Winston
 Churchill's word:
 - Now this is not the end. It is not even the beginning of the end.
 But it is, perhaps, the end of the beginning

This is about the constant drive for improvement!

Understanding the nature of major maritime accidents is a key challenge in our effort to improve....



- Safety: There nature is a difference between Major Maritime
 Accidents and Occupational Health Accidents
- The challenge with the Major Accidents is:
 - Low frequency, but dramatic consequences
 - Old knowledge has proven not to be accurate

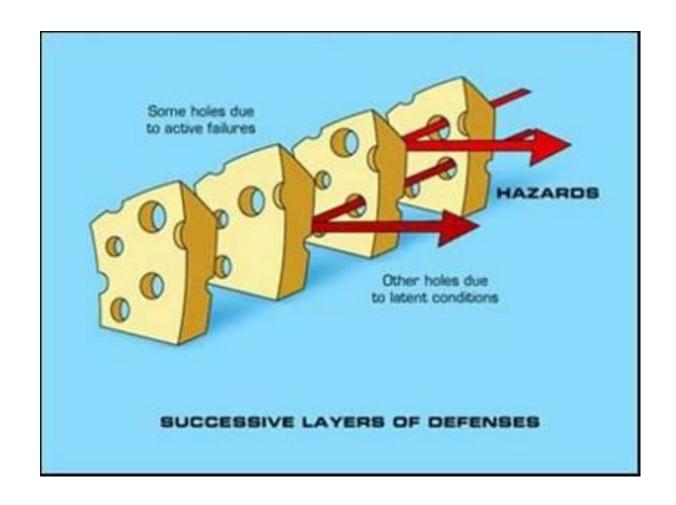


Key lessons learned from major accidents

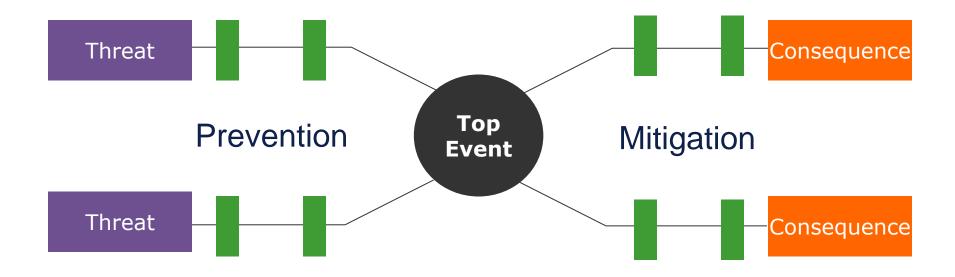
- We know 99,5% of the risk picture not black swan events
- Major accidents is usually a result multiple barriers failing
- If one of the failing barriers had worked, the accident would have been prevented

Taking the safety performance to a new level requires that we address barriers in a more systematic and structured approach

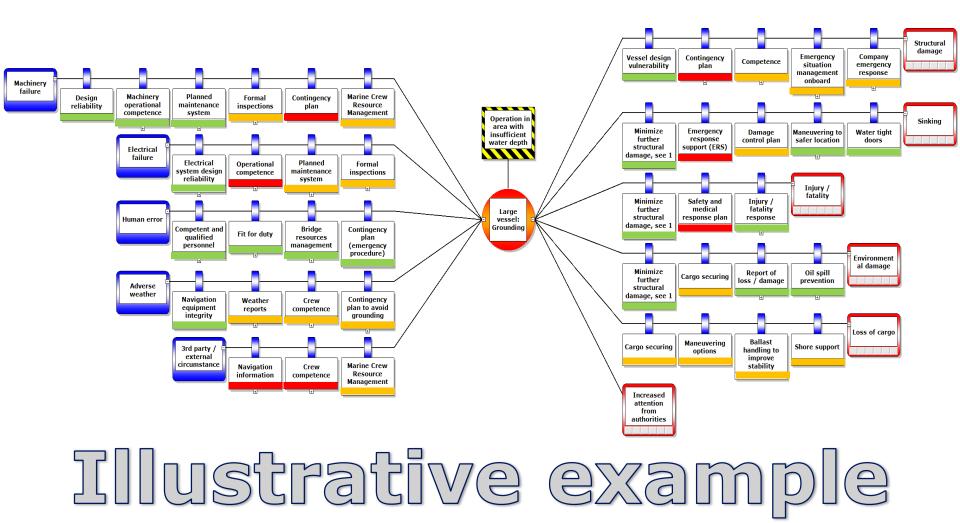
Identification and efficient use of safety barriers is key to achieving risk reduction



The barriers illustrated in the bow tie approach, gives a better understanding of the vulnerability



Barriers need to be managed as holistic systems with clear roles and responsibilities



Conclusion

Are current cruise ship safety industry initiatives sufficient

- There is a lot going on in the industry today addressing how to improve and reduce risk exposure
 - In general the right focus is there among all key players
 - Can we ever be satisfied ->NO there is always

• Is more legislation/regulation necessary either from the U.S. or the IMO?

- If we agree that there is no black swan event out there, the answer is **NO**
- That doesn't mean that we don't need to develop new legislation/regulation for new areas (e.g. LNG as Fuel)

Could we improve -> Yes

 Increasing the understanding, better management of the performance of the barriers and management of the integrity of barriers are Key

How we in DNV GL constantly strives to improve our services and contribute to the safety at sea - Internally

Improving surveys and audits

- Specialised qualification to become a Cruise ship surveyor
- Monitor our staff on a regular basis
- Experience exchange
- Specialised training for Experienced Cruise Surveyors
- Sharing lesson learned
- Updating rules and instructions to surveyors
- Measure performance internally how we are performing



How we in DNV GL constantly strives to improve our services and contribute to the safety at sea – towards our clients

- In addition to constantly addressing consistency and quality in our core services we are working with:
 - How to use our data creating new insight
 - Performance data
 - Vessel specific
 - Clients total fleet
 - DNV GL total Fleet
 - External DB with performance data
 - R&D
 - Improving way of sharing knowledge and to make specialists available for our clients





Contribute to making the Cruise Industry Safer, Smarter, Greener

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