

能載舟, 俾能覆舟

Water floats ships, water sinks ships:
The Human Element at sea

William Moore, Dr. Eng.
Senior Vice President
Shipowners Claims Bureau, Inc.
New York, NY USA

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需要罌增電腦.

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- Human error exists in shipping
- Many historical accidents show human error is main cause
- Presentation focus on human element and human errors concerns in shipping
- What the American Club does to address some of these concerns for our Members

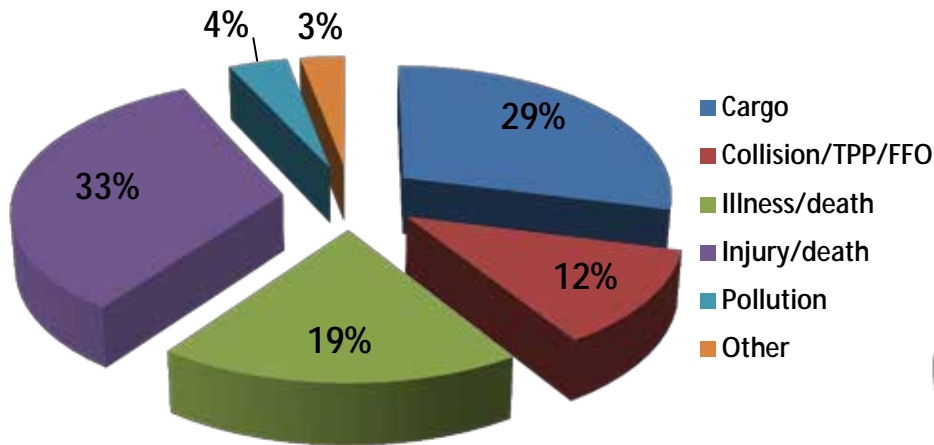
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- The world fleet GT will expand by 6% to almost 1.5 BGT by year end: new build inflow almost 3 times the projected outflow.
- Too many ships and not enough qualified personnel particularly at officer ranks
- Where are the seafarers coming from?
- Higher pressures on finding qualified and training seafarers
- Quality standards for seafarers dropping globally despite large labor supplying States

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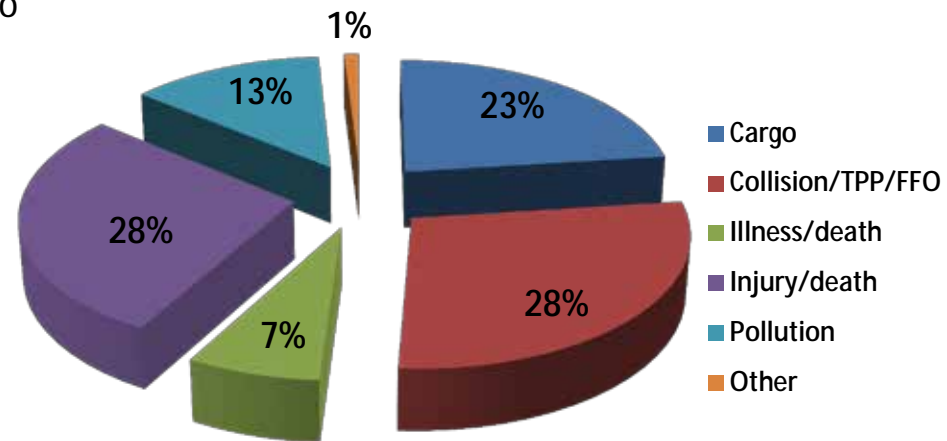
P&I Owned Claims at the American Club: 2007 to 2012

Frequency



Average annual incident count: 1,809

Cost

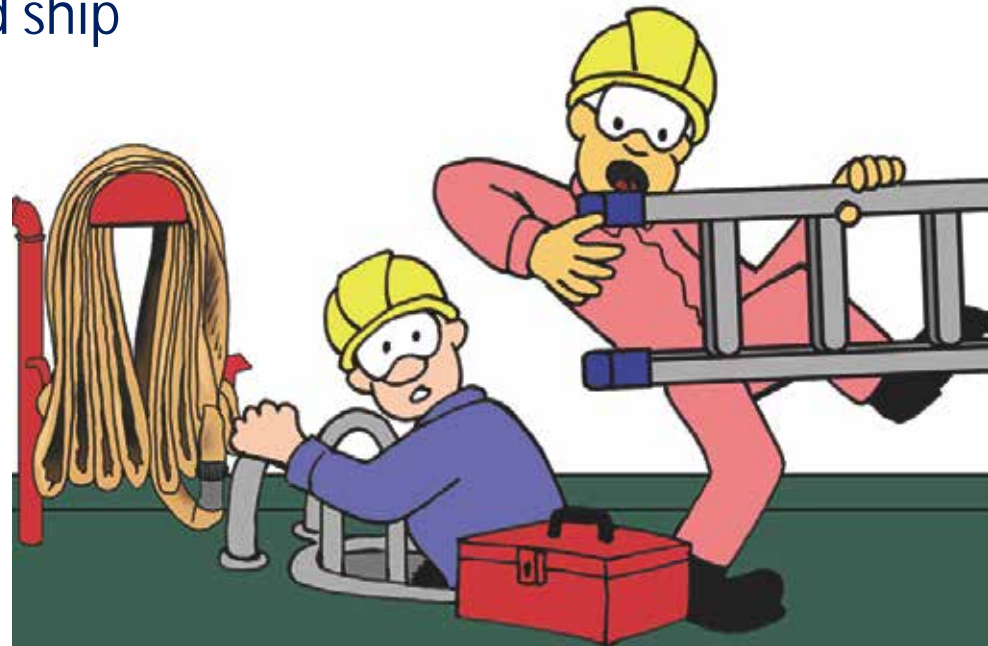


Average annual incurred value: \$60.3 million

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Injury/illness claims

- “slips, trips and falls” account for vast majority of injury incidents
- High frequency/high total cost
- Safety equipment not properly used (safety boots and goggles)
- Working conditions on board ship
- Inattention to duty
- Not following safety or environmental protection procedures
- Not 100% medically fit to perform duties
- Unhealthy diet and lifestyle



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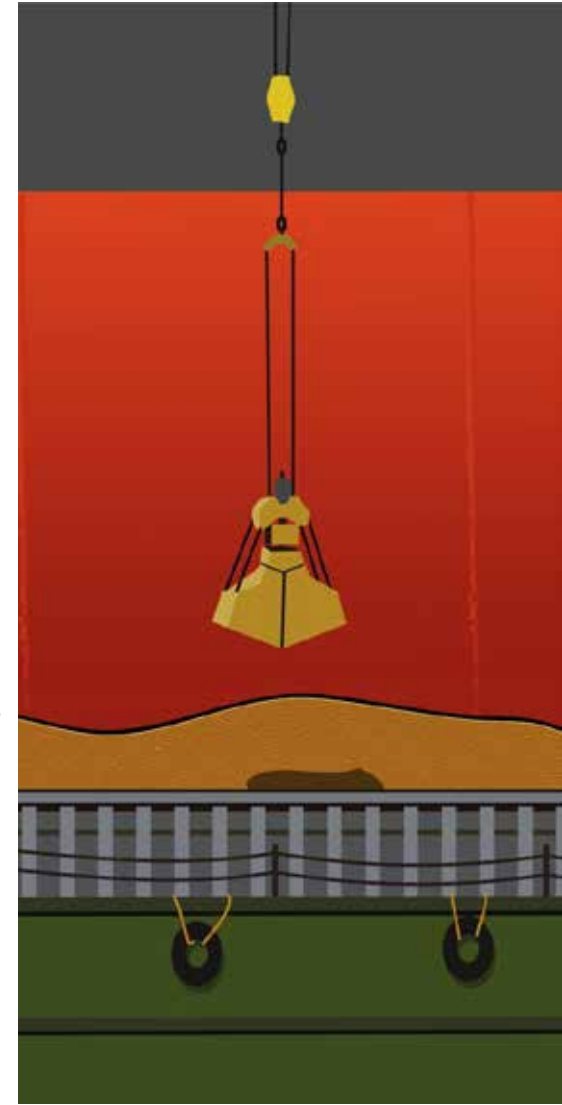
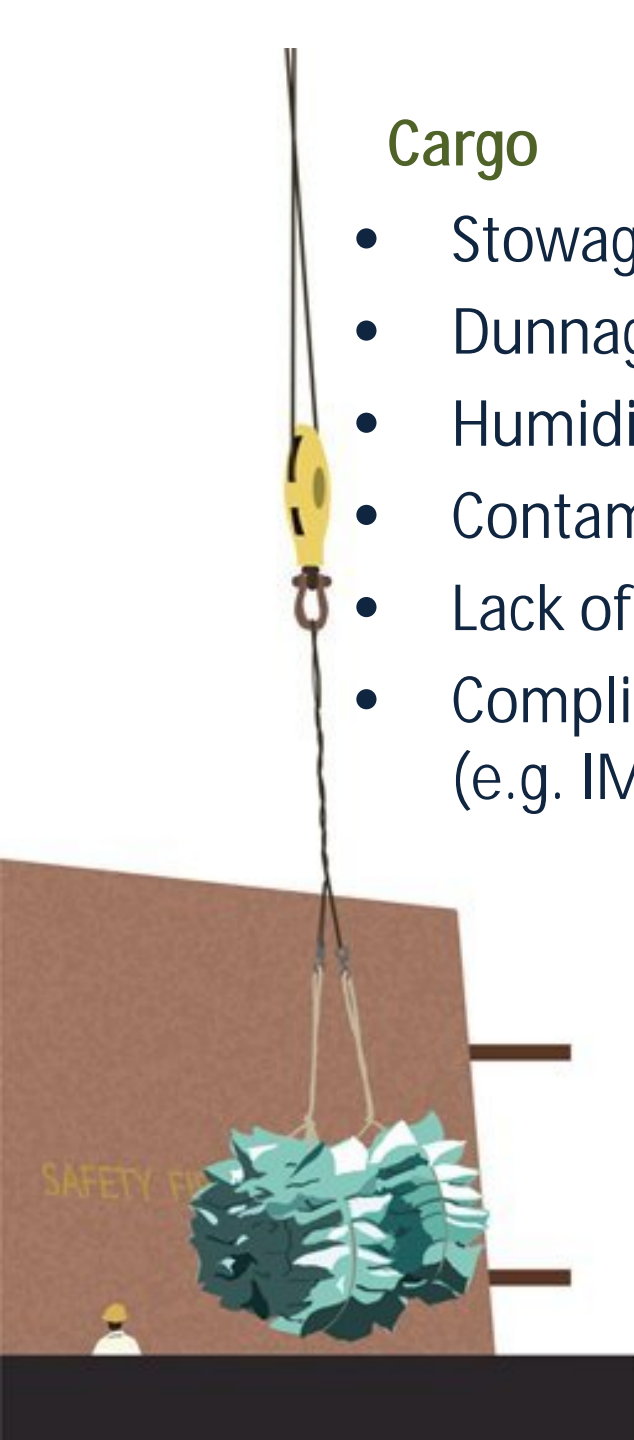
Contact damage– collision, grounding and FFO

- Majority of incidents in 'navigable waters'
- Half of incidents occur with pilot on board
- Inattention to duty
- Miscommunications
- "Competent" errors
- Over-reliance on computer technology



Cargo

- Stowage
- Dunnage
- Humidity & ventilation
- Contamination
- Lack of attention to detail
- Compliance with safety regulations (e.g. IMSBC Code)



Definition of Human Error

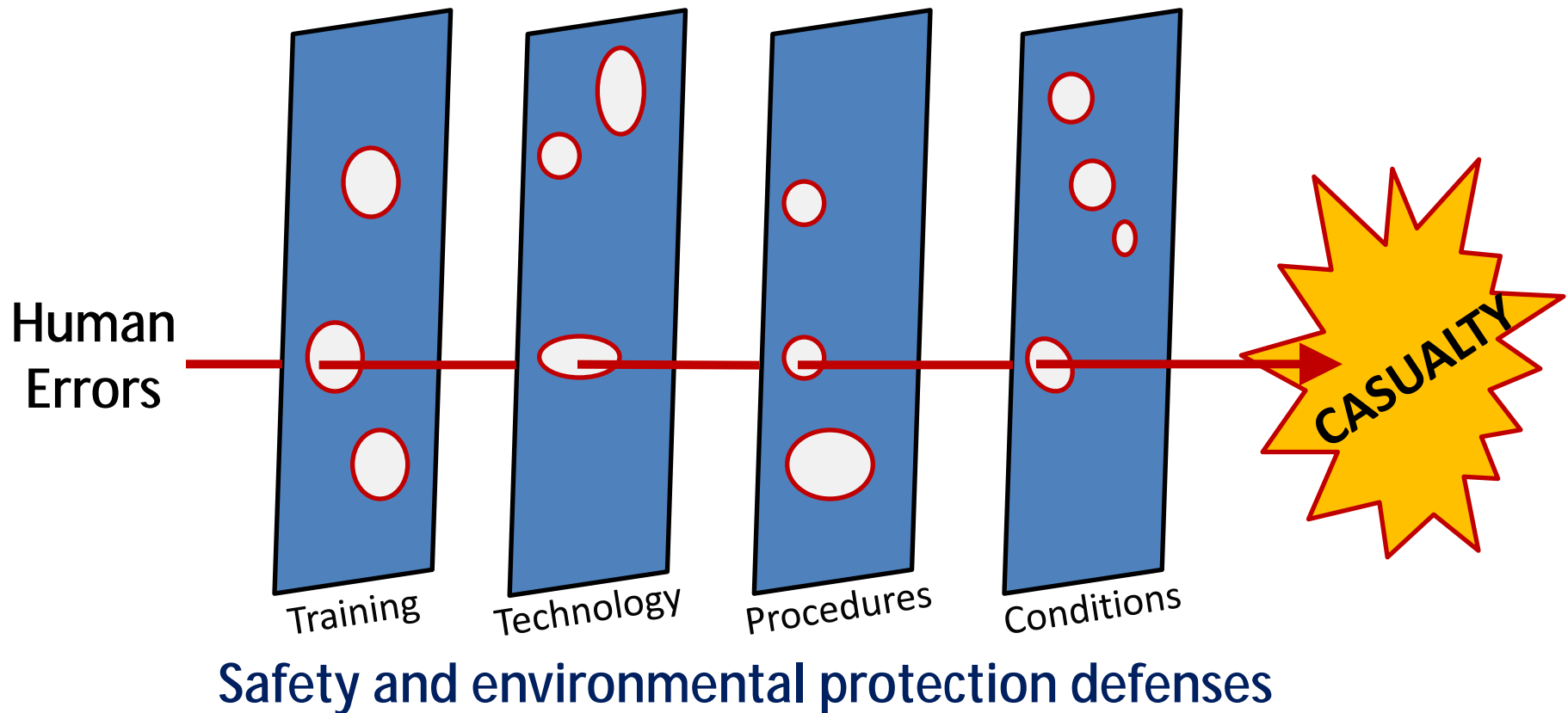
"A departure from acceptable or desirable practice on the part of an individual or a group of individuals that can result in unacceptable or undesirable results."

-International Maritime Organization



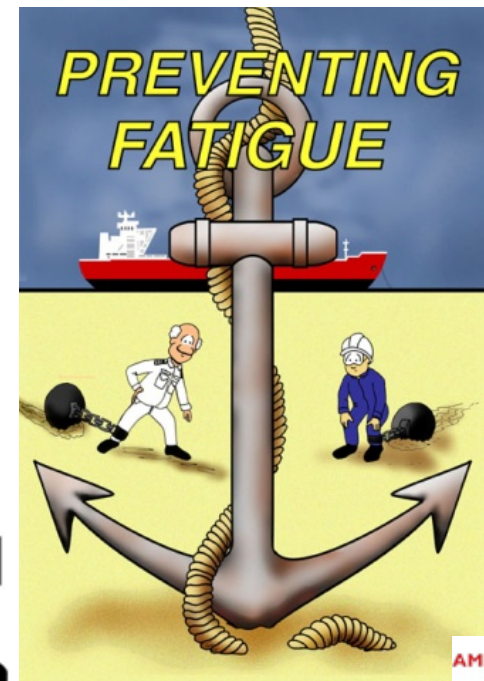
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Casualties come in series of "perfect event" human errors



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- “Acute” and “chronic” fatigue
- Coastal traders have biggest difficulties due to loading and discharging long hours regularly
- MLC 2006 and STCW Conventions have requirements in place regarding mandatory rest hours and maximum work hours
- American Club's *Preventing Fatigue*



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Technology fixes?

- New technology, new problems.
- Active workload replaced by passive workload.
- Inability to fix something on the spot if problems arise.

More regulation?

- More regulation further burdens shipowners.
- Higher work load.
- Pressures to cut corners to meet requirements.

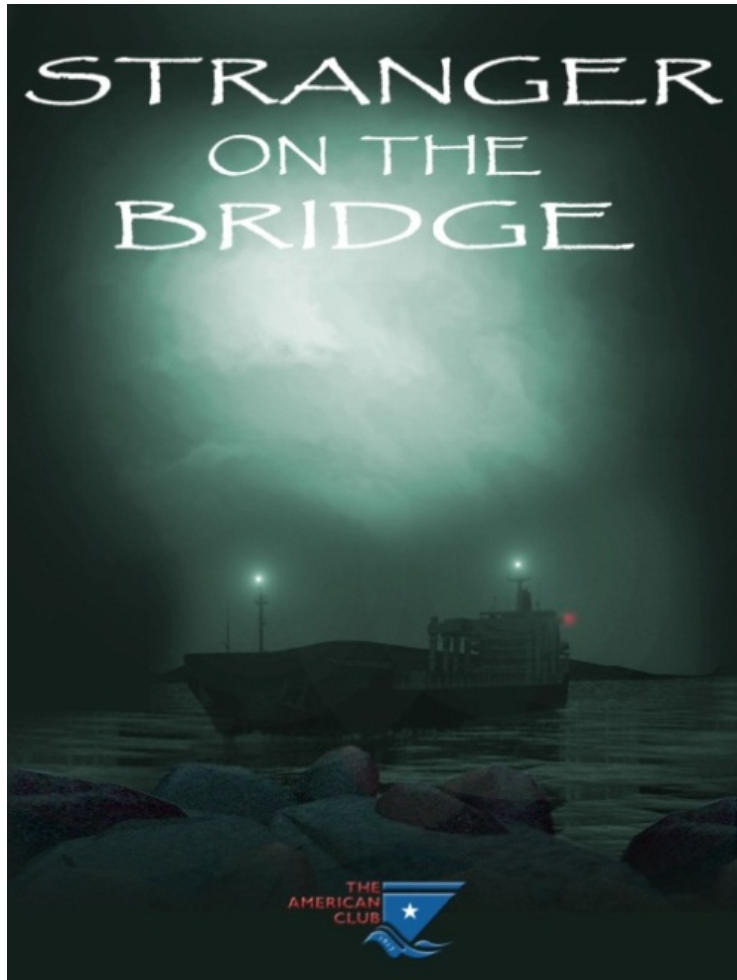
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- Pilots don't always work efficiently and safely with the ship's crew
- Where groundings, collisions and other contact related damages occur, about 50% of the cases, the pilot was present
- Reinforce Master and officers that they are in charge and work with their bridge team
- Proper checks and balances in place
- No over reliance on pilot's knowledge and experience



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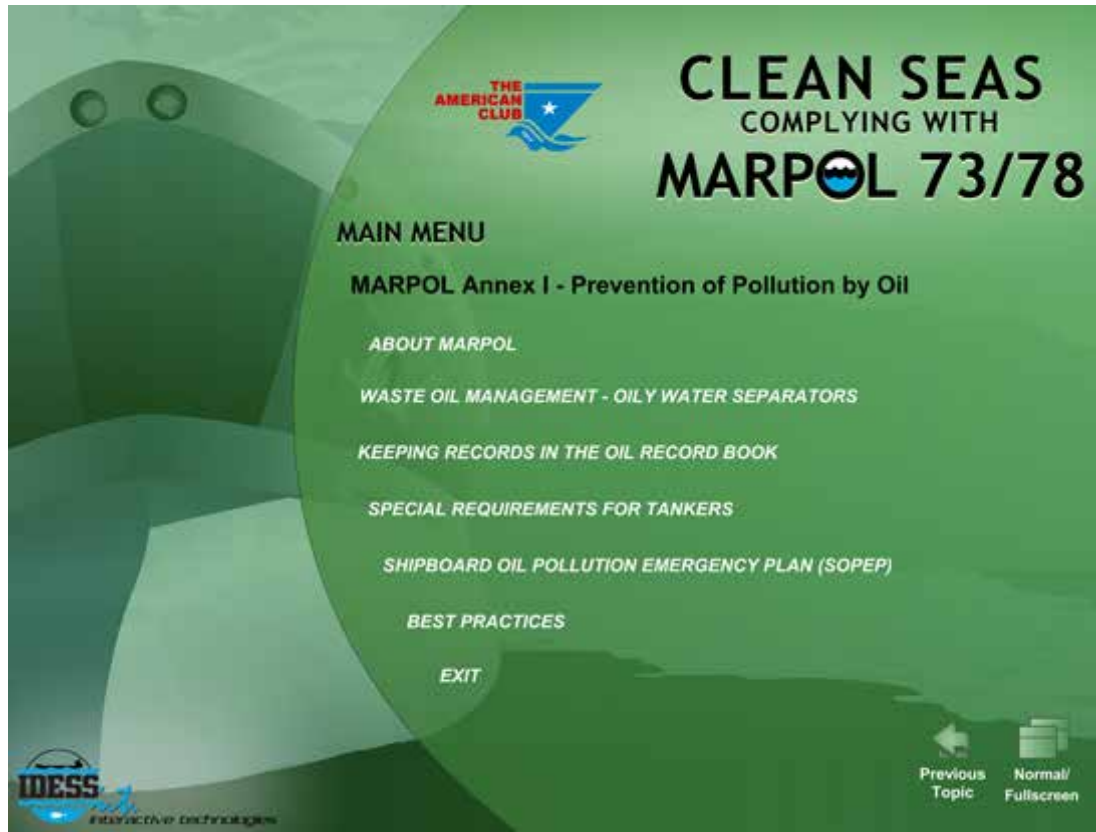
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- No substitute for training, experience and knowledge!
- Knowledgeable staff and seafarers perform better
- American Club training tools: focused and relevant
- Seminars on subjects for Members' seafarers and staffs
- E-learning tools are compliant with training requirements as per STCW Convention and ISM Code



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E-Learning Tools



Currently available to Members:

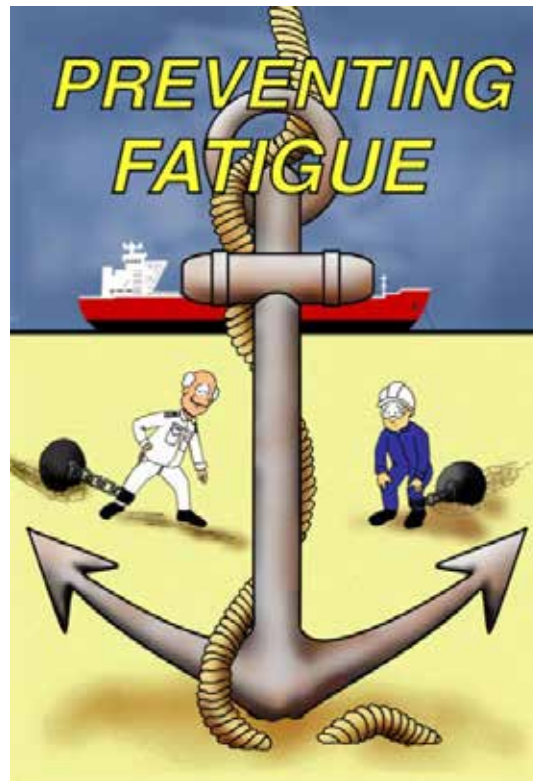
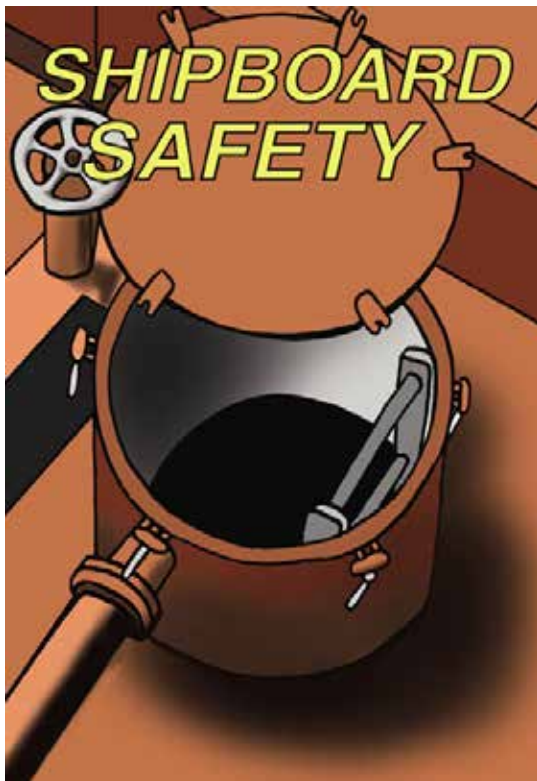
- MARPOL Annexes I, II, III, IV, V
- US EPA Vessel General Permit & Small Vessel General Permit
- Entry Into Enclosed Spaces
- IMSBC Code
- BLU Code

Under development for 2014/15:

- International Code for the Safe Carriage of Grain in Bulk
- TDC Code
- Survey and Inspection of Bulk Carriers
- Man Overboard

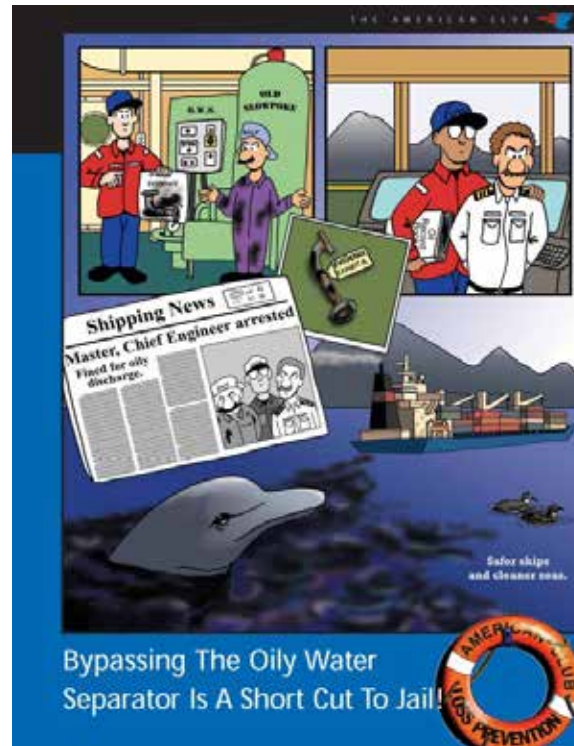
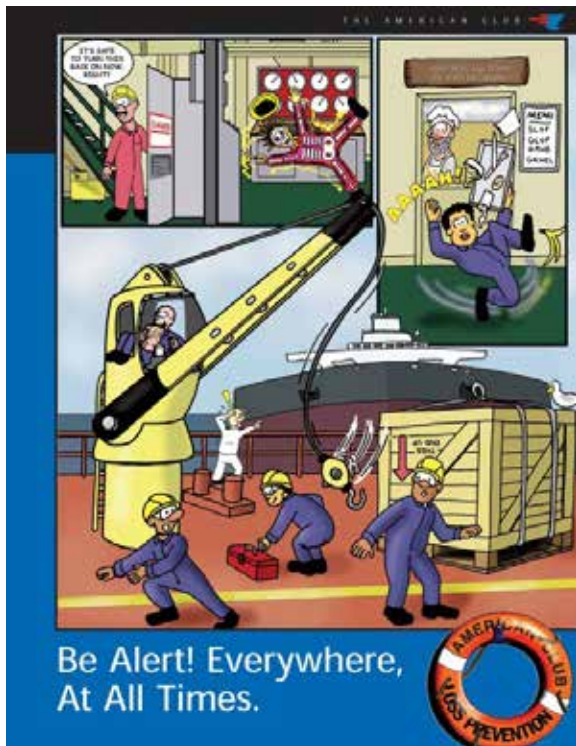
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Comics – *Preventing Fatigue* (2005), *Shipboard Safety* (2006) and *Protecting the Marine Environment* (2007)



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Posters– Safety, Security and Environmental Protection



治病不如防病

American Club website: Best Practices and Guidance

<http://www.american-club.com/page/bagged-rice-cargoes>

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Steel cargoes guidance and animations to come in 2015

Animations & Photographs



Ship & cargo sweat



Bamboo dunnage



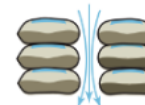
Timber dunnage



Plastic, Styrofoam, & kraft paper



Humidity & ventilation



Ventilation channels



Do's and Don'ts

多用兵不如巧用計

American Club website: Best Practices and Guidance

<http://www.american-club.com/page/piracy>

PIRACY

★ Piracy

Piracy and armed robbery of commercial ships remains a dangerous threat to our industry in many locations around the world. This section provides key information to our Members as to the following:

- frequently asked questions for P&I Clubs related to piracy;
- guidance to Members for the use of armed guards;
- relevant links to updated information on piracy; and
- relevant documents issued by the Association on piracy.

For further information on issues or concerns related to piracy and armed robbery and the use of armed guards, please contact your Managers for assistance.



▼ Frequently Asked Questions (FAQs) Regarding P&I Coverage

▼ Use of Armed Guards and Your P&I Club

▼ Club Alerts, Circulars and Articles

▼ Important Industry Links

▼ Latest Updates & Advisories



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American Club website: Best Practices and Guidance

<http://www.american-club.com/page/ebola>

EBOLA VIRUS DISEASE

Ebola Updates

- October 14, 2014. **(United States)** The New Orleans Sector of the United States Coast Guard (USCG) have issued new [Vessel Reporting Requirements from Countries Posing an Ebola Virus Threat](#) (PDF) 0.37MB  for vessels calling from Senegal, Guinea, Sierra Leone, Liberia and/or Nigeria. Members are advised to ensure compliance with these measures.
- October 9, 2014. **(United States)** The United States Coast Guard has issued [Bulletin No. 001-14, Ebola Virus Disease \(EVD\) Threat and the Maritime Transportation System](#) (PDF) 0.05MB  providing updated guidance for shipowners on preventative measures to be considered to prevent the spread of EVD.
- October 2, 2014. **(Benin)** The port of Cotonou has issued new measures aimed at preventing the Ebola Virus Disease from entering the country by ship. A summary of these measures can be found [here](#) (PDF) 0.02MB . The source of this information is the Club's correspondent, Budd, S.A. of Marseille-Fos, France.
- September 26, 2014. **(Panama Canal)** The Panama Canal Authority, in coordination with the Panamanian Ministry of Health, have issued a [series of prevention and protection measures](#) (PDF) 0.03MB  against the Ebola Virus Disease for ships transiting the Panama Canal.
- September 25, 2014. **(Singapore)** Members should take note of the [new port health clearance procedures for vessels arriving Singapore](#) (PDF) 0.04MB .
- September 24, 2014. **(Mexico, Venezuela, Brazil, Uruguay and Argentina)** The latest updates as far as the national policies for ports in Mexico, Venezuela, Brazil, Uruguay and Argentina related to the outbreak of the Ebola Virus Disease can be found [here](#) (PDF) 0.10MB  with an associated [map summarizing these policies](#) (PDF) 0.15MB . The source of this information is the South American P&I Correspondents (SAPIC).
- September 22, 2014. **(Liberia, Sierra Leone, Guinea, Nigeria, Ghana, Senegal, Togo, Benin, Cameroon, Congo, Democratic Republic of Congo, Equatorial Guinea, Angola, South Africa, Gabon and Ivory Coast)** A summary of the current port restrictions for these noted African nations as a result of the Ebola Virus Disease is presented [here](#). (PDF) 0.24MB . The source of this information is the shipping agent, Alfaship.



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How to address human error?

- Good people
- Good training
- Good teaching-- experience transfer



未來船上隻需要船長和匹。
需要船長喂狗



需要船長喂狗... 需要狗避防
船長碰儀器-