



**International Research
Ship Operators**

-Introducing New Safety Standards- Challenges and Lessons Learned

IRSO 2015 Meeting
Thursday October 22, 2015



UNIVERSITY · NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

RESEARCH VESSEL SAFETY STANDARDS

10th Edition



July 2015- 10th Edition

Photo Credit: Capt. Doug Russell/ Univ. of Washington

PIONEERS IN OCEANOGRAPHY



Photo by Jan Hahn©Woods Hole Oceanographic Institution

Challenges to consider in writing a new safety standard or revising an existing one. (this was a combination effort of revising and establishing new appendices.)

Working as a Committee

- Many authors = many different writing styles= editorial challenges
- Committee Members have day jobs- doing this as a volunteer
- Version Control- across time zones
- Differences in professional opinion among captains, marine superintendents, technicians, engineers, naval architects, funding agency representatives, lawyers, and even professional licensed engineers on the same committee.

Size of the Document and Reference Checks

Changes in forty years- between 1975 and 2015

Confirming all Code of Federal Regulations, web site URLs

Researching new standards, checking for updates which may have superseded previous regulations.

Determine which statute takes precedence over another

If it is too long a document, will lose the reader.

Appealing to varied audience, with differing levels of understanding.

Different Classes of Vessels- Ten Different Categories

To the extent possible, these standards are organized as follows:

- Required by Regulations for All Vessels
- Required by Regulations for Certain Vessels
- Inspected Vessels
- Classed Vessels
- SOLAS Vessels
- Uninspected Vessels
- Other Regulations
- Required Standards Under RVSS
- Required By RVSS Under Certain Circumstances
- Recommendations And Best Practices

Budget Impact of Establishing New Safety Standards

Workshops, Meetings, Tele-conferences/ Significant person hours invested into project

Cost of developing maximum capability documentation for older, in-house built equipment

Engineering Analysis on various equipment, ship systems, both old & new equipment.

Winch/Crane Manufacturers, Suppliers & Shipyards

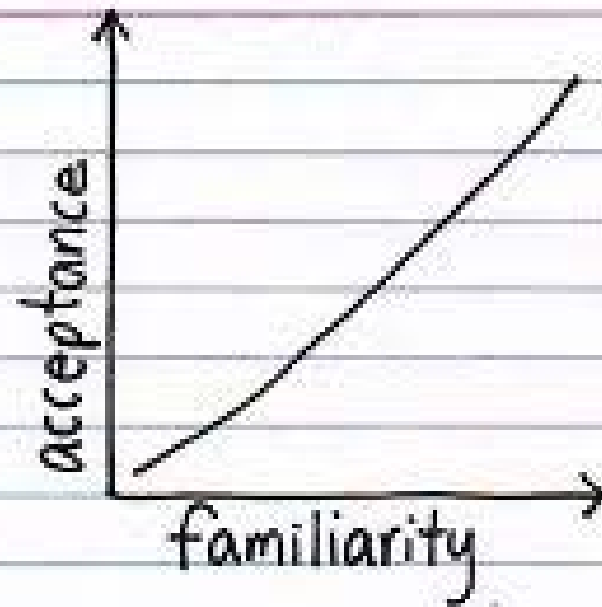
Keeping them informed of coming changes & compliance issues

Trying to hit a moving target or in the middle of a new build

Added costs to building the overboard handling equipment

ETC.

Fear of the Unknown



Compliance Dates

Setting a compliance date then trying to get everyone into compliance, or having a move a date further out.

Once a standard is in place, you are obligated to comply with what has been written.

Don't establish a safety standard that you can't live with

Accepted Trade Practices become our Laws- Advice from Dennis Nixon

Training

Training members, crew, port office personnel, users on new standards and what is expected.

Format

Keeping the Safety Standard Document current and up-to date

Format so that edits can be incorporated

Print version as well as online version

Other Items to Consider

Use Accepted Trade Practice Terminology whenever possible.

Avoid too many acronyms and run on sentences with one acronym after another.



Appendix A – UNOLS Rope and Cable Safe Working Standards

Appendix B- UNOLS Overboard Handling Systems

US Code of Federal Regulations 46 CFR 189.35-9

(1) Wet Weight Handling Gear: Wet gear shall be considered to consist of gear used to lower equipment, apparatus or objects beneath the surface of the water or for trailing objects, where the wire rope or cable is payed out beneath the surface and becomes part of the line pull at the head sheave or winch drum. Wet gear shall be designed, as a minimum, to withstand and operate in excess of the breaking strength of the strongest section or wire to be used in any condition of loading. The safety factor for all metal structural parts shall be a minimum of 1.5; *i.e.*, the yield strength of the material shall be at least 1.5 times the calculated stresses resulting from application of a load equal to the nominal breaking strength of the strongest section or wire rope to be used.



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The background is a smooth blue gradient. On the left side, there is a bright, glowing area that resembles a sun or moon reflecting on a body of water, creating a shimmering effect. The rest of the background is a solid, deep blue color.

Thank you