

RESEARCH VESSEL SAFETY STANDARDS

~ Appendix A and Appendix B ~ Wires and Winches ~

By Dan Oliver, RVOC Safety Committee Chair

It has been two years since the ninth edition of the Research Vessel Safety Standards was published in March 2009. One of the changes for how the UNOLS fleet operates that was included in the ninth edition was the addition of Appendix A; UNOLS Rope/Cable Safe Working Load Standards. The required compliance date for the UNOLS fleet with the requirements of Appendix A was set at 18 months after promulgation which made it 12 September 2010. The required compliance date was extended at the end of last summer by nine months to June 12, 2011.

Appendix A was an effort to standardize across the fleet minimum requirements for all UNOLS institutions to follow for using wire ropes and cables for science work. It also introduced a fleet wide standard that allows operation of science wire rope and cables at a factor of safety less than 5.0 when additional requirements beyond the minimum are met. Tables 6.1 through 6.4 in Appendix A provide a matrix of requirements for operating with varying factors of safety:

- Table 6.1 sets the minimum requirements and is applicable for operating with a factor of safety of 5.0 or greater.

- Table 6.2 allows operation at a factor of safety from less than 5.0 to 2.5.
- Table 6.3 allows operation at a factor of safety from less than 2.5 to 2.0.
- Table 6.4 allows operation at a factor of safety from less than 2.0 to 1.5.

Tables 6.2 through 6.4 each have increasing requirements beyond the minimum contained in Table 6.1 for tension monitoring, alarms, sheaves, deck safety, wire testing, and training to operate at lower factors of safety.

There is no requirement in Appendix A for any UNOLS institution to operate with a factor of safety less than 5.0. That is left to each UNOLS institution to decide on and will depend on many factors such as age of the equipment, the type of science that is done, the size of operating crews, even the culture within the institute. For institutions that need to make science handling equipment upgrades to operate at a factor of safety less than 5.0, such as installing tension monitoring systems or replacing sheaves, this can be done by submission of a proposal under NSF's Shipboard Scientific Support Equipment program.

In the near future the Safety Committee will be putting forth an

amendment to Appendix A that incorporates feedback received during the Appendix A workshops that Rich Findley has been giving in the past six months. There are no significant changes in the pending amendment so no further extension on compliance with Appendix A is expected. Take some time to review again what it will take for your institution to comply with the requirements in Appendix A as the deadline this summer approaches.

A counterpart to Appendix A is Appendix B which is currently in draft form and posted on the UNOLS website for review and comments. Appendix B brings design standards to the UNOLS fleet for science load handling systems. As with Appendix A, there are requirements for UNOLS institutions to comply with for handling systems. Take advantage of the review period to thoroughly review the draft and provide your comments back to the Safety Committee.

Another opportunity to the UNOLS fleet for feedback on both Appendix A and B will be during the upcoming Research Vessel Operators Committee meeting scheduled for 26-28 April in San Diego. One of the agenda topics for that meeting will be a review of both appendices and an opportunity to get feedback from the vessel operators.

