SAFE WORKING LOADS

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PROBLEM

.680 F/O Cable

Breaking Strength - 46,000 lb

Wt. In Sea Water/Kft - 608 lb

Working Load - 10,000 lb

5,000m of cable in water weighs

10,000 lb

ANOTHER EXAMPLE

3X19, 9/16” Trawl Wire

Breaking Strength - 32,500

Wt. In Sea Water/Kft - 428 lb

Working Load - 6,500 lb

5,000m of cable in water weighs

7,000 lb

R/V MELVILLE is currently working in Kermadec Trench > 10,000m

REGULATIONS

Address only:

Manned submersible handling equipment SF-4.7 required

Cranes SF - 5 required

Oceanographic cables not addressed

No Universal SF

Institutions use different SWL’s

Scientific Groups are faced with adjusting operations after arriving at different ships

GOAL

Establish a consistent set of guidelines for use throughout UNOLS fleet for SWL’s

PROGRESS

1. Less than we would like
2. Discussions with USCG and ABS determined that no standards exist for oceanographic operations
3. Both organizations suggested that we provide a suggested set of standards

4. Review of procedures developed by Southampton Oceanography Center looks promising

5. Allows SF's down to 2:1 if certain procedures are followed as load increases

6. Requires capability to accurately monitor loads

NEXT STEPS

- Continue Evaluation of Southampton Process
- Determine Ability of UNOLS Ships to Accurately Monitor Tensions
- Discuss SWL Determination with Cable Manufacturers
- Consider Involvement of Others in Process
  - e.g. Glosten, TMT, Rochester, McWhite, etc.