

Brief Thoughts on Appendix A from the SHIP INSPECTION PROGRAM



2023 RVTEC MEETING
Ted Colburn

Inspection process in brief related to Appendix A

- We send out the Appendix A assist sheets before an inspection and request they be used for a self-assessment and be returned ahead of the inspection.
- Usually check the wire pool database to see if anything needs to be asked or other actions.
- We usually conduct a spot check of criteria while aboard.

RVSS Appendix A Compliance:

Appendix A Assist Summary for Each Wire or Cable.

Updated July 2023 with Synthetic Criteria added.

Appendix A Assist Summary for Each Wire, Cable or Synthetic Tension Member		Updated 7_15_2023 JMS/wec				
Note: This is not all inclusive. See Appendix A RVSS Edition 11 for requirements.		Select Applicable Column FS				
Requirement or Attribute For Steel Tension Members	FS of 5.0 or higher	FS from 2.5 to 4.99	FS from 2.0 to 2.49	FS from 1.5 to 1.99	Compliant	Comments
Post Cable/Wire SWL in clear view of the winch operator	Applies	Applies	Applies	Applies	Y/	
General						
Determine Cable/Wire Safe Working Load (SWL) as: Assigned Breaking Load / Factor of Safety	Applies	Applies	Applies	Applies	Y/N	
Lubricate tension member <12 months (A.5.8)					Y/N	
Fresh Water Wash (lesser of: end of cruise or < 1 month)					Y/	
Develop Extenuating Circumstance Procedure (A.8.4)	Applies	Applies	Applies	Applies	Y/	
Tension Monitoring						
Have ability to keep load < SWL: May be calculated w/"g" factor at least 1.75 or from Tensiometer	Applies				Y/N	
Have ability to keep load < SWL: Actual from monitoring system		Applies	Applies	Applies	Y/	
Tensionometer display at operator's station with 3 Hz refresh		Applies			Y/	
Tensionometer display at operator's station with 10 Hz refresh			Applies	Applies	Y/	
Tension continuously monitored using a tension trending graph			Applies	Applies	Y/	
Tensionometer logging at 3 Hz		Applies			Y/	
Tensionometer logging at 20 Hz			Applies	Applies	Y/	
Tensionometer Recalibration at least every 6 mo.		Applies	Applies	Applies	Y/	
Tension measuring system maintained with 4% accuracy		Applies			Y/	
Tension measuring system maintained with 3% accuracy			Applies	Applies	Y/	
Alarms						
Audible and visual tension alarms w/data logging		Applies			Y/	
Audible and visual tension alarms w/data logging			Applies		Y/	
Audible and visual tension alarms w/data logging				Applies	Y/	
Alarm conditions automatically logged		Applies	Applies	Applies	Y/	
Sheaves and Fairlead Rollers						
Sheaves & Rollers: As large as practical	Applies				Y/	
Sheaves & Rollers: D/d ratio meet 40:1 or 400d1 whichever is		Applies	Applies	Applies	Y/	
Sheaves: Groves as close to d as possible and no more than		Applies			Y/	
Sheaves: Groves per Ref A 1.1 (Groove size relative to nominal diameter of wire rope: 3/16" to 1/4" 3% to 6%; over 1/4" 2.5% to 5%)			Applies	Applies	Y/N	
Note: Allowance from June 2023 update that 9/16 in. dia. 3X19 wire rope may be used on sheaves with a groove dia. between .576 in. and .748 in. provided the sheave tread diameter is 27 in. or more.						

Requirement or Attribute For Synthetic Tension Members	FS of 5.0 or higher	Compliant	Comments
General			
Communication established with Wire Pool for the synthetic tension member use.	Applies	Y/N	



Naval Architecture
Marine Engineering
Marine Surveying
Salvage Engineering

Common Spot Check: Maintaining Accuracy

Requirement or Attribute	Select Applicable Column FS			
	FS of 5.0 or higher	FS from 2.5 to 4.99	FS from 2.0 to 2.49	FS from 1.5 to 1.99
Tension Monitoring				
Tension measuring system maintained with 4% accuracy		Applies		
Tension measuring system maintained with 3% accuracy			Applies	Applies

“Maintaining” accuracy within 4% or 3% depending on the factor of safety selected.

How has the tolerance been changing?

Recalibrating every 6 months does not satisfy this requirement

Tension Monitoring

It may be best to use a known weight to track changes.



Other typical spot checks & related observations:

- What has been the max load experienced for a period of time, and what were the conditions/circumstances?
- How are logs maintained for tension members the vessel is responsible for, including those off the vessel? The recommended way is to use the wire pool database to maintain them for you. The Wire Pool can maintain your cable inventory/history and running use logs.
- May ask to observe during demonstrating deployments to see how the operations are conducted in foul weather, even if flat calm.
- Observe to see safety warnings, physical and/or visual barriers are established, and door and accesses are secured.

Questions? Suggestions?

Ted Colburn

JMS Naval Architects & Salvage Engineers

34 Water Street • Mystic, CT 06355
www.JMSnet.com

Ted@BeechHillBison.com
860 608 8052



Naval Architects & Salvage Engineers