

Appendix A Assist Summary for Each Wire, Cable or Synthetic Tension Member		Updated 1_9_2024 JMS/wec					
Note: This is not all inclusive. See Appendix A RVSS Edition 11 for requirements and operational insights.		Select Applicable Column FS					Comments
Requirement or Attribute For Steel Tension Members	FS of 5.0 or higher	FS from 2.5 to 4.0	FS from 2.0 to 3.0	FS from 1.5 to 2.0	Compliant		
Post Cable/Wire SWT in clear view of the winch operator	Applies	Applies	Applies	Applies	Y/N		
General							
Determine Cable/Wire Safe Working Load (SWT) as: Assigned Breaking Load / Factor of Safety (A.8.1)	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) (A.5.9)					Y/N		
Develop Extenuating Circumstance Procedure (A.8.4)	Applies	Applies	Applies	Applies	Y/N		
Tension Monitoring							
Have ability to keep load < SWT: (A.8.1) May be calculated w/"g" factor at least 0.75 or from Tensiometer	Applies				Y/N		
Have ability to keep load < SWT: Actual from monitoring system		Applies	Applies	Applies	Y/N		
Tensionometer display at operator's station with 3 Hz refresh rate		Applies			Y/N		
Tensionometer display at operator's station with 10 Hz refresh rate			Applies	Applies	Y/N		
Tension continuously monitored using a tension trending graph			Applies	Applies	Y/N		
Tensionometer logging at 3 Hz		Applies			Y/N		
Tensionometer logging at 20 Hz			Applies	Applies	Y/N		
Tensionometer Recalibration at least every 6 mo.		Applies	Applies	Applies	Y/N		
Tension measuring system maintained with 4% accuracy		Applies			Y/N		
Tension measuring system maintained with 3% accuracy			Applies	Applies	Y/N		
Alarms							
Audible and visual tension alarms w/data logging		Applies			Y/N		
Audible and visual tension alarms w/data logging			Applies		Y/N		
Audible and visual tension alarms w/data logging				Applies	Y/N		
Alarm conditions automatically logged		Applies	Applies	Applies	Y/N		
Sheaves and Fairlead Rollers							
Sheaves & Rollers: As large as practical (A.8.1)	Applies				Y/N		
Sheaves & Rollers: D/d ratio meet 40:1 or 400d1 whichever is		Applies	Applies	Applies	Y/N		
Sheaves: Groves as close to d as practical and no more than 1.5d		Applies			Y/N		
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%) 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.			Applies	Applies	Y/N		
Deck Safety							
Good safety practices (A.8.1)	Applies				Y/N		
Establish danger zones / safety zones		Applies	Applies	Applies	Y/N		
Warning notices posted			Applies	Applies	Y/N		
Physical or visual barriers			Applies	Applies	Y/N		
Doors and accesses secured			Applies	Applies	Y/N		

Vessel _____ Date _____ Tension Mbr _____ Winch _____ Length _____ NSF Reel # _____

Testing						
Break Testing every 2 yrs (A.8.1)	Applies	Applies			Y/N	
Break Testing every yr if 10% decrease in ABL or cutback (A.8.1)	Applies	Applies			Y/N	
Break Testing every yr			Applies	Applies	Y/N	
Break Testing every 6 mo. if 10% decrease in ABL or cutback			Applies	Applies	Y/N	
Logbooks: UNOLS wire identifier: Cable Inventory/History and Running Use						
Logs stay with the wires transfer with the wire	Applies	Applies	Applies	Applies	Y/N	
Log of wire Break Testing	Applies	Applies	Applies	Applies	Y/N	
Log Cutbacks	Applies	Applies	Applies	Applies	Y/N	
Log Spooling Operations	Applies	Applies	Applies	Applies	Y/N	
Log of Lubrication	Applies	Applies	Applies	Applies	Y/N	
Wire Train Description	Applies	Applies	Applies	Applies	Y/N	
Maximum payout for each cast.	Applies	Applies	Applies	Applies	Y/N	
Maximum load for each cast by calculation or monitoring.	Applies	Applies	Applies	Applies	Y/N	
Winch Operator						
Operator deemed competent in writing by master and owner	Applies				Y/N	
Operator "Certified Competent" in writing by master and owner renewed annually.		Applies	Applies	Applies	Y/N	
Master verify qualifications and designate approved operators.		Applies	Applies	Applies	Y/N	
Training record for formal operator training program for winch, handling apparatus, and monitoring system.		Applies	Applies	Applies	Y/N	

Suggestions: Please contact Ted@beechhillbison.com

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	
A Synthetic Tension Member operated to a nominal FS = 5.0 on	Applies	Y/N	
Designate SWT	Applies	Y/N	
Post SWT in clear view of the winch operator	Applies	Y/N	
Develop Extenuating Circumstance Procedure (Required for steel tension members, not specific to synthetics)		Y/N	
Tension Monitoring			
Have ability to keep load < SWT:	Applies	Y/N	
Tension monitored at with a display refresh rate of 10 Hz.	Applies	Y/N	
Tension continuously monitored using tension trending graph.	Applies	Y/N	
Logging tension data at at refresh of 20 Hz (every 50 mS).	Applies	Y/N	
Tension measuring system calibrated at least every 6 months.	Applies	Y/N	
Tension measuring system maintained with an accuracy of	Applies	Y/N	
Alarms			
The handling system fitted with both audible and visual tension alarms that sound and illuminate prior to FS of 5.6	Applies	Y/N	
Sheaves and Fairlead Rollers			
Sheaves & Rollers: D/d ratio meet 40:1	Applies	Y/N	

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Deck Safety			
"Danger Zones" identified around tension members under	Applies	Y/N	
All personnel excluded from Danger Zones (to the extent possible) such that a sudden failure cannot result in injury .	Applies	Y/N	
Warning notices displayed at points of access.	Applies	Y/N	
Physical and/or visual barriers.	Applies	Y/N	
Doors and accesses to the overboarding area secured	Applies	Y/N	
Testing			
Tension member samples sent for testing prior to use.	Applies	Y/N	
Tension member samples sent for testing after use.	Applies	Y/N	
Logbooks: UNOLS Tension Member identifier: Winch and system manufacturer: Cable Inventory/History and Running Use			
Record of all spooling operations	Applies	Y/N	
Record of all cut backs, including those due to re-terminating.	Applies	Y/N	
Number and/or duration of deployments since last break test.	Applies	Y/N	
Maximum tension of each deployment and line out at time of maximum tension.	Applies	Y/N	
Maximum payout of each deployment.	Applies	Y/N	
Description of the sheave train.	Applies	Y/N	
Winch and system manufacturer.	Applies	Y/N	
The log transferable with the tension member.	Applies	Y/N	
Highly recommended* that the NSF Wire Pool Data Base be used to meet above requirements.	*	Y/N	
Winch Operator			
Certification by the Winch Owner that all Winch Operators are	Applies	Y/N	
Written documentation in place showing that each operator has been through and successfully passed a formal owner/operator developed training program on the (a) winch, (b) handling apparatus, and © monitoring system.	Applies	Y/N	
Master verification that operators are qualified.	Applies	Y/N	
Master verification that operators are designated.	Applies	Y/N	
Operator certifications renewed annually by Master.	Applies	Y/N	
Operator qualifications refreshed and documented if there are configuration changes to controls or to the hardware.	Applies	Y/N	

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