

EOM Cable Test Results Summary

Rev 1.1 11/14/03

Sample Description	Breaking Strength (lbs)	Break Strength after Flex Test (lbs)	Strain at 6000 lbs (%)	Torque at 6000 lbs (in-lbs)	Rotation at 6000 lbs (deg/ft)	Notes
<i>SBC Deployed Cable Failure Analysis Tests</i>						
1st Location where float was definitely located during deployment (C-I)	19660	-----	-----	-----	-----	Broke mid-span, away from socket.
2nd Location where float was definitely located during deployment (L-M)	19350	-----	-----	-----	-----	Broke mid-span, away from socket.
SBC Kevlar Cable: Section where float was not attached. (B2-C2)	18550	-----	-----	-----	-----	Clean mid-span break. There was some float movement so it's possible that a float had migrated to this location.
SBC Kevlar Cable: Anchor Termination	20480	-----	-----	-----	-----	Broke 4" from termination, inside bending strain relief.
SBC Kevlar Cable: Snubber Termination	10760	-----	-----	-----	-----	Broke at nose of bending strain relief. This BSR was obviously overly stiff.
SBC Kevlar Cable: Location below all floatation. (E-E1)	38270	-----	-----	-----	-----	Broke at resin socket, indicating little reduction in strength of cable.
SBC Kevlar Cable: Fish-bite transition point (R-S)	16350	-----	-----	-----	-----	Broke right at end of steel braid layer.
<i>Tests on New Cable Segments</i>						
SBC Kevlar Cable	42500	9750	0.7	-20	-0.5	Pull to failure after flex tests broke at edge of float attached, i.e. the high-bend point. % Reduct. = 77%
SBC Vectran Cable	56500	23860	0.68	-25	-0.9	Break after flex test occurred at flex point. % Reduct. = 58%
JDR Vectran Cable Design 1B	48400	42750	0.59	65	2.2	Break after flex test occurred at flex point. % Reduct. = 12%
Cortland CSM Cable	22500	20200	2.2	-110	-29	Break after flex test occurred at socket. % Reduct. = 0%
Rochester CSM Cable	35850	22700	1.15	-35	-1.4	Break after flex test occurred at flex point. % Reduct. = 37%
		25600				Break after flex test occurred at flex point, 86000 flex cycles %Reduct. = 28%