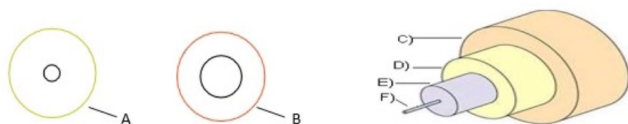
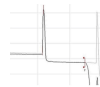



1. You shoot the backdoor fiber using both 1550 and 1310 from the rack and see the event marked 7 on the 1550 trace. What does this event indicate? **Macrobending in the fiber.**
2. Which fiber type does the UHD telemetry use? **Single-mode.**
3. What light wavelength does the node fiber A (blue SFP) use? **Receives 1550.**



Label the following:

4. Core **E**
5. Single Mode **A**
6. Buffer **D**
7. MultiMode **B**
8. Jacket **C**
9. Cladding **E**
10. What does the acronym "VFL" on an OTDR stand for? **Visual Fault Locator.**
11. 0 (zero) dBm equates to how much power? (With a working transmitter and receiver) **1 milliwatt.**
12. It is safe to look at the end of a fiber optic cable when utilizing an OTDR for troubleshooting? **False.**
13. Two cables are joined by an ST connection. Each cable and the connector introduce a -2db loss. What is the total loss for the optical patch in decibels? **-2 + -2 + -2 = -6dB.**
14. Using a power meter attached directly to a node that is on, you would expect to see **5-7 dbm** from the SFP.
15. Typical optical fiber wavelengths (850nm, 1310nm, 1550nm) are visible to the human eye. **False.**
16. What components are needed for a fiber optic system to operate? **Optical connector, transmitter, photo electrical receiver, optical cable.**
17. The first number in the size of a single fiber represents? Ex. 0/125um **Core size.**
18. When utilizing an OTDR for troubleshooting, if the index of refraction is not readily available, the safe index for accurate measuring is? **1.47.01.**
19. When troubleshooting fiber optic cables using the OTDR, always **Both A and B. Use a launch whip so you do not have a "Dead Zone" in the trace, Never plug a system fiber directly to the OTDR to prevent contamination and damage to the OTDR.**



20. When troubleshooting a fiber optic cable, a VFL is used for? **Identify bends, Faulty connectors, splices, causes of signal loss.**
21. In the analysis of a signal trace though a fiber optic cable, a spike upwards in the trace representation of? **Events in the trace of the cable.**
22. What color is most commonly used on the jacket of single-mode fiber whips? **Yellow.**
23. It is considered a good practice to use a cletop on other cleaning device every time you disconnect and reconnect a fiber connector. **True.**
24. Of the following, which is the greatest source of attenuation in the ROV fiber optic system? **The large number of connection points.**
25. Why use fibers instead of traditional electrical communications for the ROV system? **To reduce the effect of electrical noise.**
26. Tightly coiled fibers is not recommended because: **Light will attenuate through the sides of the fiber and increase system light loss.**
27. To properly test for FORJ (Fiber Optic Rotating Joint) it is best to use the meter set to? **dB.**
28. What type of connector is shown: **ST.** 
29. Identify the UHD fibers by COMMON name. When the fiber is used, where is data starting and ending on the entire fiber line?

Spare Fiber	Back of rack to ROV IPA
Back-door Fiber	ROV Node 6B to Rack Node 1A
Main Fiber	Rack Node 1B to ROV Node 6A
Survey Fiber	S. De-multiplexer to ROV SJB