

# Fiber Trouble Reporting Procedure

The purpose of this document is to assure that all fiber problems are handled appropriately and that all proper steps are followed. This document is not meant to be a one-stop source for cleaning and handling of fiber but rather how problems are dealt with and escalated. Please check with your Manager for training and documentation on cleaning and handling of fiber.

When a problem is found (with a new or existing link), take the following actions before escalating to the Cable Plant Office. This will limit unnecessary repair charges for your department and the Division.

- 1) Verify TX/RX are connected to the correct strands where appropriate.
  - 2) Verify all bends meet or exceed minimum Carnegie Mellon University standards.
  - 3) Clean all patchcords following Computing Service's acceptable procedures. Ask your Manager for training if necessary.
  - 4) Verify fiber path continuity using a visible fault indicator, checking at all intermediate patch points.
- \*\*Note: Do NOT look directly into any fiber strands as some links use non-visible lasers that can be harmful to the eyes\*\***

After you have narrowed the problem down to being on the fiber plant, you can then escalate the problem to the Cable Plant Office. This should be done via email sent to: [cp-estimates@andrew.cmu.edu](mailto:cp-estimates@andrew.cmu.edu).

The subject should include the level of criticality so that the Cable Plant Office will know how quickly the problem needs to be handled. The body of the email must contain all info on which fiber(s) are having the problem as well as all steps taken to narrow down the problem (include any readings taken if necessary).

The Cable Plant office will clean the suspected strands' couplers and connectors on the permanent link and perform loss measurement tests. If the loss tests look good then the initial person reporting the problem will be contacted and be asked to try again to establish a link. If the loss tests do not look good then the Cable Plant office will employ contractors for repair. After the repair has been completed, the Cable Plant office will contact the initial person reporting the problem and ask them to try again to establish a link.