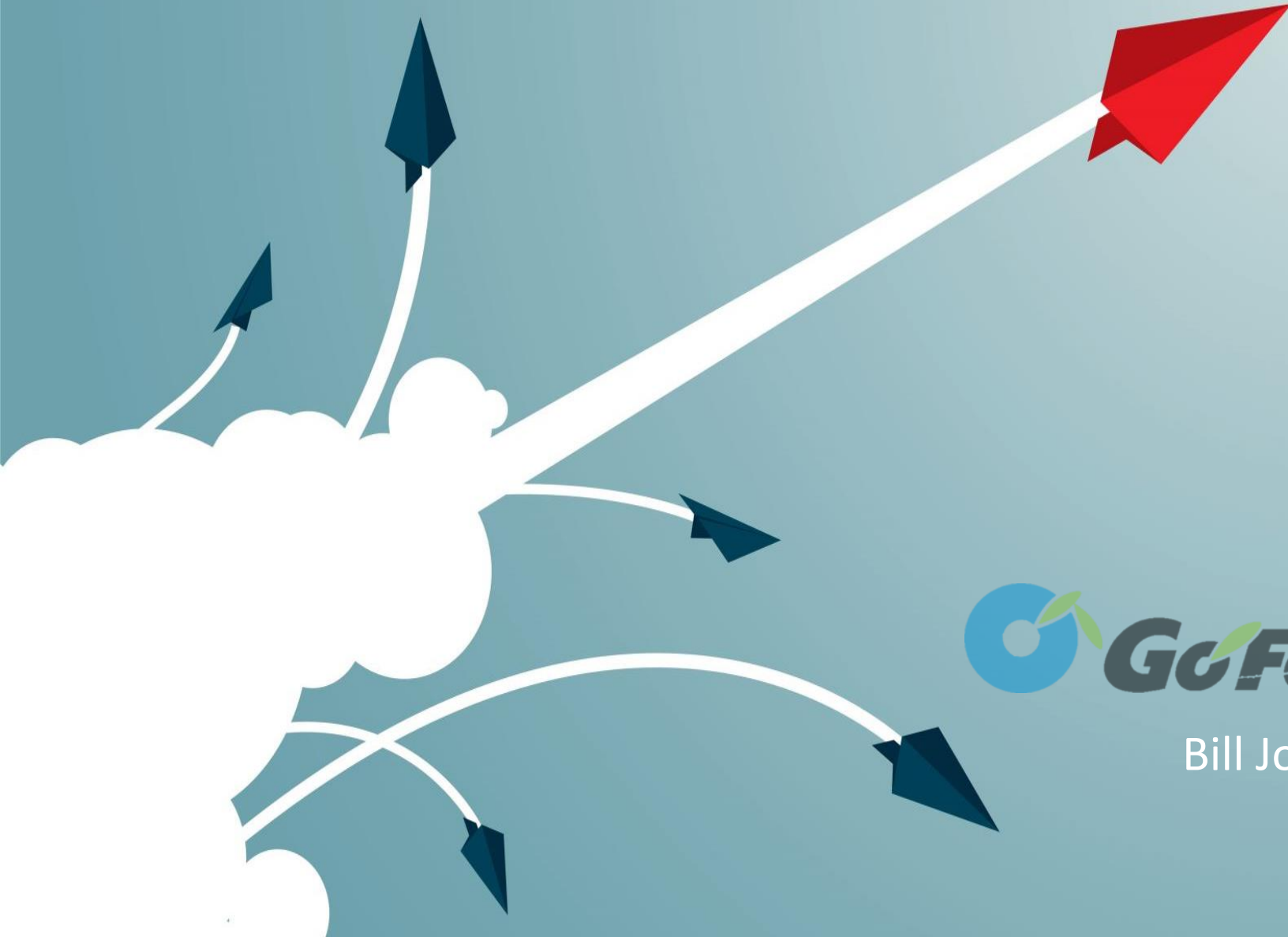


Preventable Service Events



Bill Johnston

Equipment Failure

Can you prevent and equipment failure?

Fiber Cut

Can you prevent a fiber cut?

Dirty Connector End Face

Can you prevent a dirty connector end face?

Dirty Connector End Face

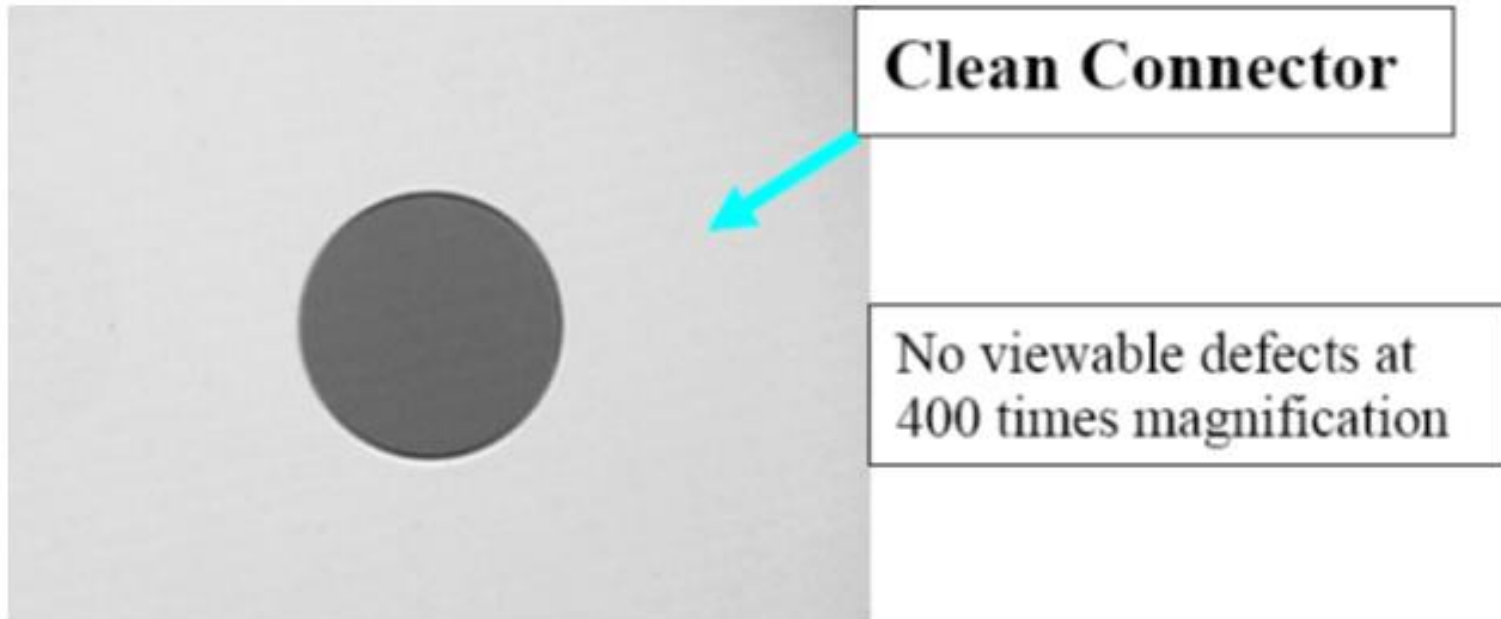
Can you prevent a dirty connector end face?

- Inspect the connector end face
- Cleaning
 - What do you clean with?
 - What process do you follow?
 - Dry only
 - Combination Cleaning wet/ dry
- Inspection after cleaning and prior to connection
- Only leave exposed for a short time

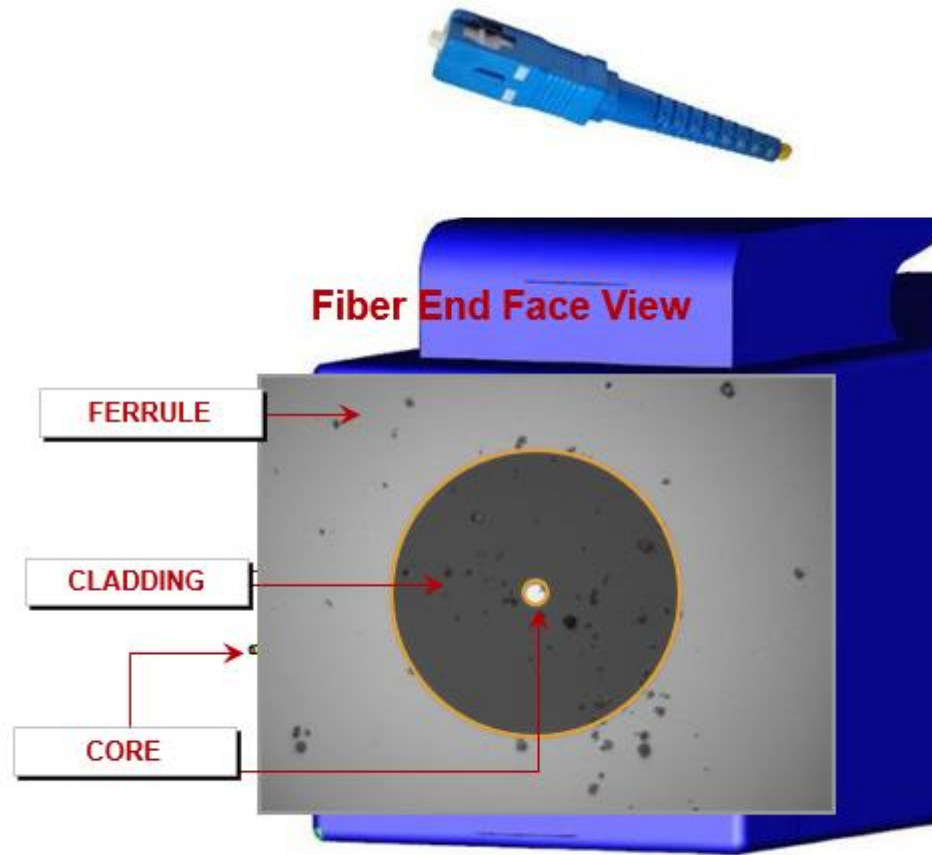
Clean Connector End Face

Inspection Software to determine clean

100% clean connector end face free from all viewable defects

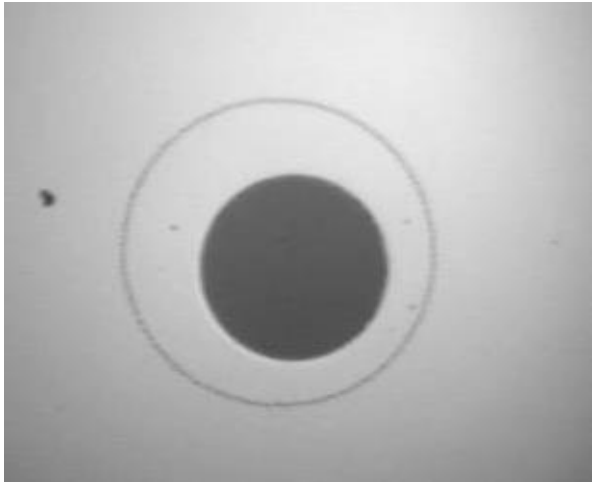


Anatomy of a Fiber Connector

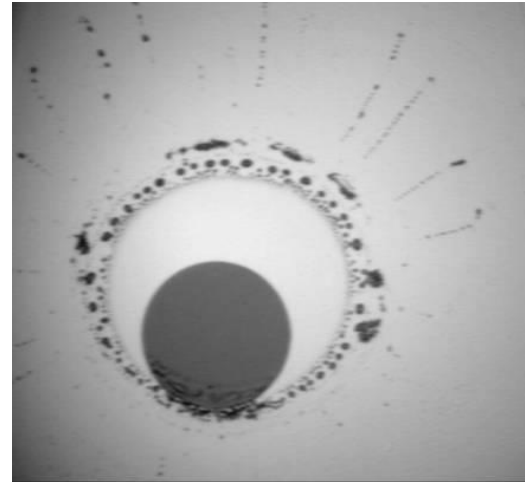


Courtesy of JDSU

End Face Pictures



Dust Ring



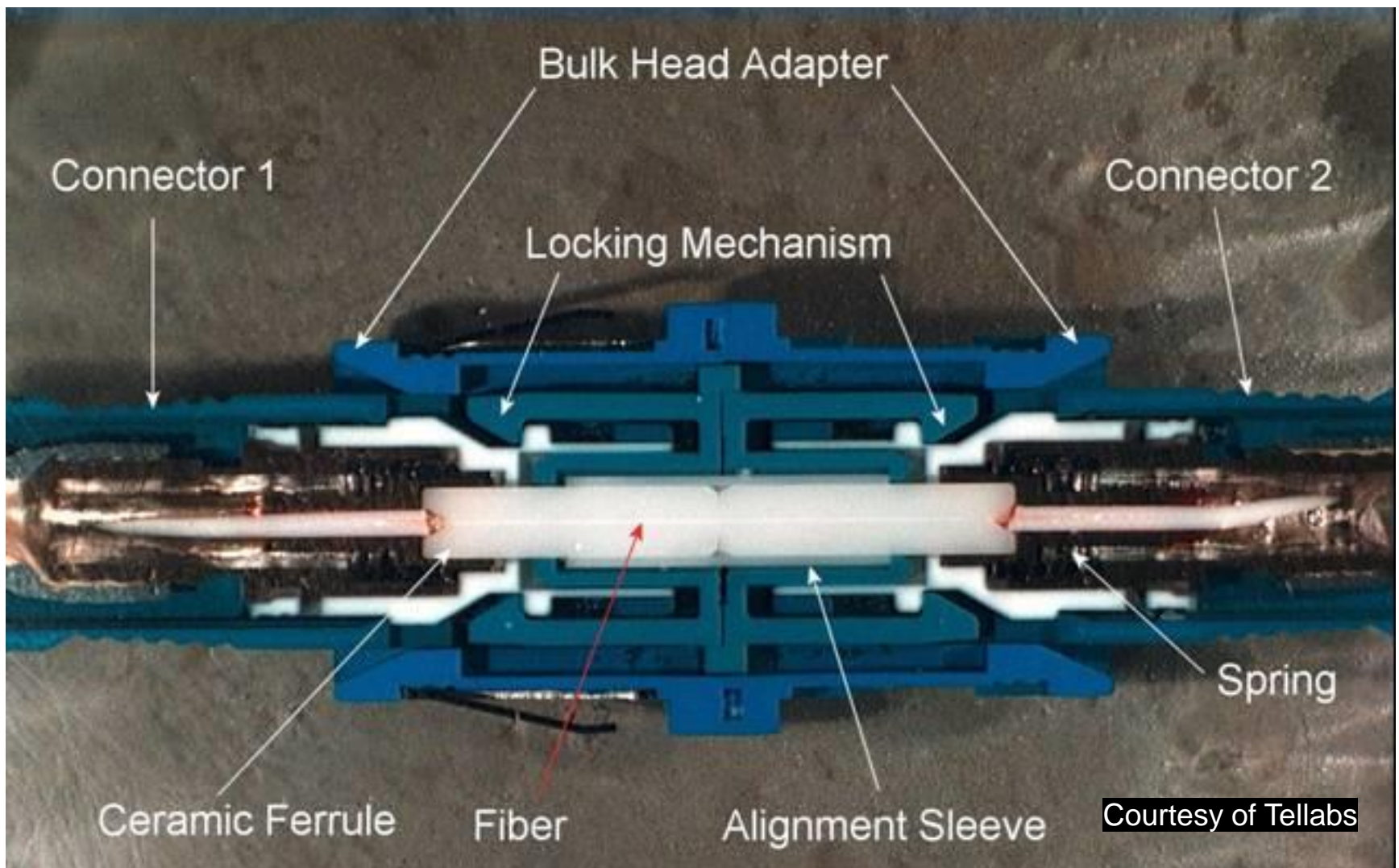
Halo

Loose Connection

Can you prevent a loose fiber connection?

- Connectors are made to lock in place
 - Feel and hear when it clicks into place
 - Pull slightly on the boot of the connector

Anatomy of a Connection



Quality of the Fiber

- What standards does the manufacturer meet?
- Do they have the certifications to prove the quality?
- What is their process to ensure the quality of the product?
- Do they provide test data?
- Do they store records of the testing?
- Do they clean and inspect the connector end face?
- How many times do they clean and inspect a fiber connector end face before it leaves their factory?

Anatomy of a Fiber

This is Kevlar which is used to protect the fiber core.

This is a jacket of the fiber used to protect the fiber core and cladding.

This is the cladding material which is about the size of a human hair. In the center of the cladding is the core where the signal/ light travels. The core is one tenth the size of the cladding.

This is the jacket of the fiber that's also used to protect the fiber core.

Bend Radius Issue

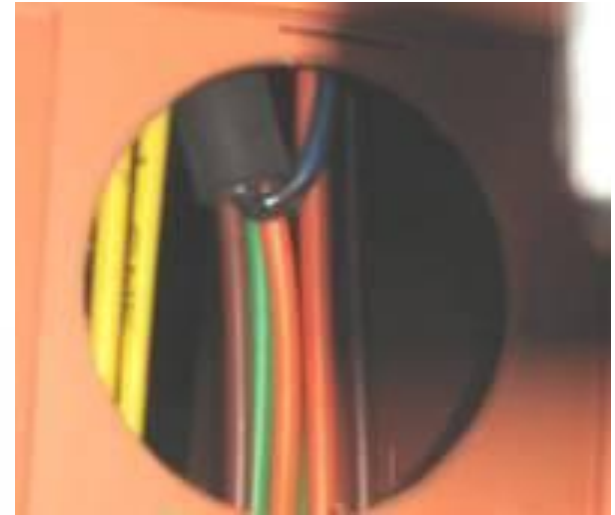
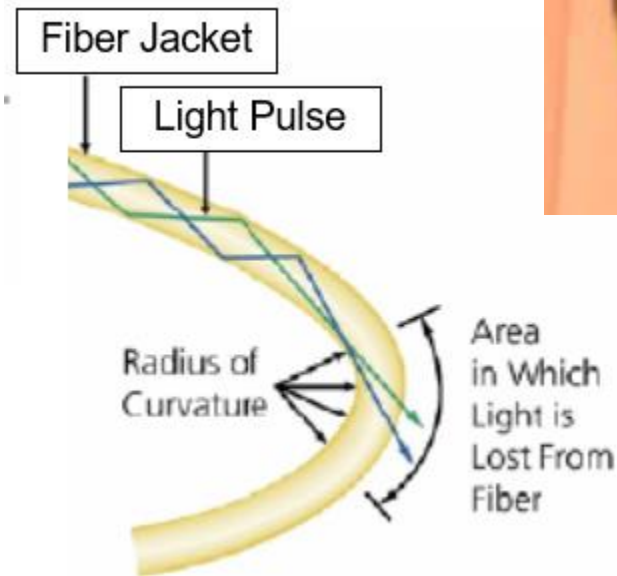
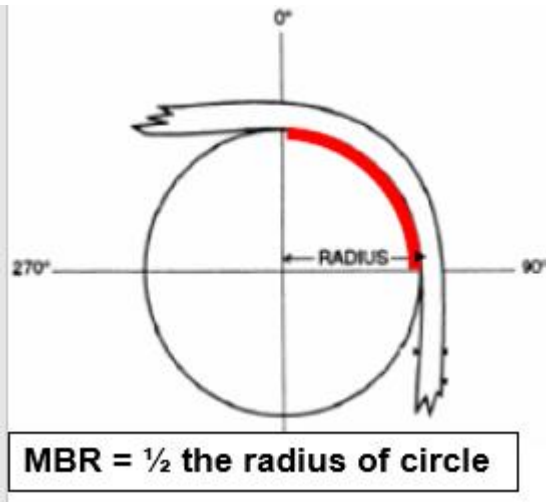
Can you prevent a bend radius issue?

- What is the bend radius of the fiber?
- What type of glass do you use?
- Proper handling of the fiber
- Proper routing of the fiber
- Don't secure too tightly – 9-cord - ties

Remember that fiber is made of thin glass.

- Would you ever fold a glass in half?
 - Why not?

Minimum Bend Radius (MBR)



Bad Splice

Can you prevent a bad splice?