GENERAL TRAINING DIRECTORATE

NANSC

Optical fiber network planning and installations

Duration: *20* working Days (4 weeks)

How Will I Benefit?

1) List the advantages of optical fiber cable than any other media.
2) Describe how the light propagates inside the optical fiber cables.
3) List losses reasons in fiber.
4) Describe the dispersion types and how to overcome.
5) List fiber types and its applications
6) List fiber cables types.
7) Splice Fiber Cores and handle with various cable types.
8) Terminate fiber Cables and handle fiber inside splice tray
9) Calculate the Loss Budget.
10) Inspect the continuity and polarity of fiber links by VFL
11) Inspect the connectors by Microscope or video.
12) Test the overall losses in fiber links by LSPM
13) Prepare testing reports and analysis records.
14) Identify events in optical fiber links using OTDR.
15) Extract OTDR reports.
16) Analyze OTDR traces
17) Validate optical fiber links.
18) List the location and methods for laying optical cables OSP.
19) Design OSP Optical fiber networks
20) Extract Bill of Quantity (BOQ) for different OSP applications.
21) List the ISP requirements in installation
22) Describe the fire rating codes
23) Extract Bill of Quantity (BOQ) for different ISP applications.
24) Describe the new termination methods as fast connector
25) Describe the new splicing methods as mechanical splice and mid span technique.
26) Describe the Data Center Parts and section
27) Design data center

Ministry of Civil Aviation
Egyptian Holding Company for Airports and Air navigation
National Air Navigation Services Company
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Who Should Attend?

ATSEP interested in Optical fiber such that understand, describe, install and terminate optical fiber links, Testing and validating optical fiber links, design optical fiber OSP and ISP networks and design DC networks.

Course Contents:

- Optical fiber introduction
- Optical fiber Frequencies
- Decibels
- Losses
- Dispersion
- Fiber types
- Cables structure and optical fiber cable types.
- Optical fiber Transmitters and Receivers
- Loss Budget calculations
- VFL Inspection
- Testing by LSPM
- Testing by OTDR
- Using Software Tools for reporting and analysis
- OSP installation methods
- ISP installation
- OSP networks
- ISP networks
- Data Center.

Course price / trainee: 2000 $