Certified M38999 SAE AVIATION Connector Course

5 Day Certified M38999 SAE Aviation **Connector Course**

COURSE OVERVIEW: Our 38999 Connector Course is designed to meet the requirements of both military and commercial aircraft, as well as installs onboard US Navy ships for UAV aircraft systems. Students will terminate a variety of ST and SC connectors as well as terminating the M38999 4-channel connector with M29504/4 and M29504/5 termini pins or sockets. This course is industry recognized and based on the SAE ARP 5602 Aerospace Fiber Optic Training Standard. Students who complete the aviation COI will meet the installation requirements of NA01 1A-5-5-4 and are offered the Option of taking the ETA SAE Fabricator Certified Aerospace Fiber Optic Installer.

WHO SHOULD ATTEND: Our course is designed for those students who will be installing and maintaining fiber optic systems and equipment for commercial or military aircraft applications. After completing this course, each student will be able to successfully install, test and troubleshoot fiber optic cables and systems for both UAV and aircraft platforms. Students will become proficient in the termination processes for a variety of connectors used in the commercial as well as the military sector. This course is also designated to meet the requirements of the SAE ARP 5602 and the NA01 1A-505-4.

CERTIFICATIONS: Successful completion of the five day course and test qualifies you to receive:

KITCO - Certificate of Completion
ETA FOI EXAM (OPTIONAL) - (Electronics Technician Association)):

1. For an additional fee of $175.00 we will administer the ETA SAE Fabricator (SAEFAB) exam.

2. For an additional fee of $150.00 we will administer the ETA Fiber Optic Installer (FOI) exam.

Upon successful completion of the exam, you will be certified as an ETA Certified Fiber Optic Installer or SAE Fabricator.

COURSE OUTLINE

DAY 1: FIBER OPTIC, THE PHYSICAL LAYER

- Introduction
- History, advantages of optical fiber
- Principles of light, manufacturing Video
- Operating wavelengths, attenuation
- Cable, connector, component types
- QPL products, safety, toolkits

DAY 2: 8 HOUR HANDS-ON LAB

- Homework review
- Demonstration: COTS ST
- Lab: Build 1 meter COTS ST - ST MM cable assembly, tight structure
- Demo: polishing procedures & inspection procedures, polish ST - ST cable assembly & inspect
- Demo: epoxy multimode ST connector
- Lab: build epoxy 2 meter ST-ST multimode assembly
- Lab: build 2 meter epoxy ST-ST MM cable assembly

DAY 3: 8 HOUR HANDS-ON LAB

- Homework review
- Lecture: cable link loss testing
- Lab: start testing ST-ST cable
- Demo: epoxy M29504/4&5 termini pin/socket
- Lab: build 1 meter epoxy ST-M29504/5 MM termini socket
- Lab: test ST-M29504 termini pin/socket

DAY 4: 8 HOUR HANDS-ON LAB AND EXAM

- Homework review
- Lab: complete testing of rework cable assemblies
- Demo: 4 channel M38999 connector
- Lab: assemble 4 channel M38999 connector
- Demo: 4 channel testing /video inspection probe
- Lab: MQJ testing 4 channel M38999 connector
- Tool inventory

DAY 5: OPTICAL TIME DOMAIN REFLECTOMETER (OTDR) AND TROUBLESHOOTING

- Homework review
- OTDR theory
- Demo: OTDR operation & troubleshooting
- Lab: practice OTDR operation
- Lab: troubleshooting
- Course overview, ETA exam (optional)