

## Course Description

This highly intense Hands-On 3-day or 4-day course provides an in depth Real-World experience of Air Pressure and Leak Locating with a Hands-On Lab environment, giving students a Real-World experience and practical Field training.

This training will represent both dual and single source feeds. Will cover miles of underground cable fed with air pipe, which has manifolds. There can be pneumatic sections dual feed. There are also a number of single feed pneumatic sections in aerial and buried sections. This consists of miles of single source cable. The air source supplied by a dryer feeding both air pipe and distribution panels can be an option.



Students can use the hands on labs as a leak locating tool, using the graphing procedures taught as well as leak locating formulas. The students use the graph footages and compare with leak locating formulas. This gives the student an appreciation of all leak locating procedures and it will then become his or her decision as to which is best used in the field application.

### Optional 4th day (Hands-On in the Field)

There is an optional fourth day. If selected, the class moves from the classroom into the field for helium leak locating and actual hands on work. Thus using the knowledge learned in the last three days in a Real-World atmosphere. If the fourth day is selected then a portion of the third afternoon will be used to set up a predetermined central office to perform helium leak locating exercises. The fourth day is a plus since you have the opportunity to purify a selected central office vault. This consists of checking each cable from the tip or vault splice to where the cables leave the vault. When completed the technician will know whether any plugs are leaking through the core or to the atmosphere and if they should or should not be replaced by using the Calculating Air Flow Formula. Also, if leaks were detected in the sheath (insulating joints or 3/8 tubing attachment or other damage repairs) they will be located. Any leaks found will be tagged or recorded for technicians to repair at a later date.

## Students Will Learn

- **Identification of Both Tools and Materials Used in Pressurization**
- **OHMS Law of Air Pressure (pressure-flow- resistance)**
- **Leak Locating Formulas**
- **Graphing**

- **Locating Leaks**
- **And More**

## Target Audience

OSP Technicians, CO Technicians, Installation, Repair and Maintenance Technicians, Technical Support Technicians, Support Managers and anyone requiring Hands-On skills for Air Pressure Leak Locating.

## Prerequisites

A basic understanding of telecommunications and basic electronics. This information can be obtained in our courses below Hands-On Basic Telephony & TeleCom Electronics

## Course Outline

To be customized to clients scope and objectives.

## Notes

3 Days

Optional Fourth (4) Day Central Office Purification and Field Leak Locating using Helium  
Items desired for the additional training day if possible

1. Central Office close to training location
2. High flowing air pipe at selected C.O.
3. One (1) direct buried route. Working out of C.O.

## Delivery Method

Hands-On Instructor-led with Hands-On Labs and Exercises.

## Equipment Requirements

(This apply's to our hands-on courses only)

Training Room Desk or writing space for up to ten students and an overhead projector with screen. Access to site equipment, tools and testers and field access to locate leaks and perform cable repairs.

NOTE If fourth (4) day is selected the following equipment will also be required

- Two (2) helium tanks preferably with regulators and helium flow controllers
- Air pressure schematics/stick maps and cable records if available
- Safety equipment if required such as men working signs or a warning arrow should be provided by your company.

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

## Course Length

3 Days