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### **ORIENTATION**

This lesson provides information on the Field Technical Operations  $\sim$  New Hire Program. The lesson describes the following:

- Administrative Activities
- Guidelines for Success
- Cable & Communications Overview
- History of Cable Television
- Cable System
- Safety
- New Hire Training Process
- The Weeks Ahead

### **Administrative Activities**

Every Connect/One course has administrative activities associated with it. This section addresses these activities and other general information that you need to be aware of.

#### **Introductions**

You'll be in training with your peers and instructors for several weeks. Let's take some time to introduce ourselves!

- Name
- Where you will be working
- Previous employment
- What brought you to Connect/One?

### **Training Schedule**

Training will take place Monday - Friday. Your instructor will provide specific hours of training. You are responsible for arriving promptly and ready to work at the start of the training class and staying for the duration of the day. You will be provided 1 hour for lunch and various breaks throughout the day.

Eating and drinking is typically reserved for areas identified by the instructor. Smoking is prohibited in all Connect/One's buildings. Your instructor will advise where the designated smoking areas are in the building.

#### **Attendance**

The Attendance Form is the method used to document your attendance in this course. You are required to print neatly and sign your name on the form, and record the hours you are present in class daily. You are required to adhere to the regulations outlined in Connect/One Guidelines for Success.

The course will provide you with the basic knowledge and skills required to perform your job in the field. The main emphasis in this course is to address the safety precautions that you must follow to prevent injuring yourself or damaging equipment.

#### **Learning Methodologies**

This course is structured to assist you in learning by using various methods of adult learning, including lecture, demonstration, hands on practice, group activities, and knowledge checks. A significant part of your time during training will also be spent in the field, under the guidance of a mentor (i.e., senior technician, supervisor, or instructor).

### **Cell Phones and Pagers**

Cell phones and pagers are distractions. These items must be placed in the silent mode or turned off. You will be provided opportunities to respond to personal calls during breaks. The phone numbers that the instructor provided are also available for your family to contact you in case of an emergency while in class.

### **Required Documentation**

As a new hire, you have many documents that are required by Connect/One for your position. The instructor will assist you in completing any appropriate local documentation and obtaining your Identification card if you do not already have one.

#### **Defensive Driving**

You will attend a Defensive Driving Course as part of the New Hire curriculum. Successful completion of this class is required for you to complete the Field Technical Operations New Hire Program. Additionally, refresher courses are taught approximately once every three years. Additional driving evaluation and training may be implemented by the instructor.

#### **Fire Exits**

Each training facility has a procedure for the actions to take in the event of a fire. The class shall evacuate as explained by the instructor and assemble at the designated location. Do not fight any fires in the facility unless directed by a staff member.

### **Tools and Equipment**

You will be issued tools and equipment including personal protective equipment (**PPE**) as appropriate during the course. The control of the tools and equipment are your responsibility. You will receive instructions on how to use each piece of equipment. You will be required to complete a checklist identifying all of the equipment received from Connect/One.

### **Dress Code**

Your training occurs inside a training facility and outside of the facility. Your dress depends on the training being received. Your instructor(s) will inform you of the expected dress code requirements.

#### **Guidelines for Success**

Connect/One welcomes you to the New Hire Training Program. Our mission is to supply highly skilled employees to support the Connect/One business goals and provide career development opportunities for Connect/One employees. Connect/One is committed to your success. The following factors are critical components for successful completion of the New Hire Training Program.

- Connect/One expects that you will be present, on time and actively participate in all training activities. If you encounter an emergency situation that prohibits you from attending class, you must contact your instructor and supervisor as soon as you are aware of the situation. Upon 3 documented instances of unexcused absenteeism and/or lateness, the Connect/One instructor will refer you to Employee Relations. Your attendance at each daily session is critical to your success.
- Testing and assessment will take place throughout the program. You will be "tested" for knowledge and "assessed" for practical skills. Certification is achieved when you have successfully completed all training requirements for a position and have demonstrated the necessary job competencies by passing the associated written tests and skills performance assessments for that position. The passing grade for written tests is 80%.

Final written tests are comprised of questions from each learning experience and will be administered at the conclusion of the program or during the final week of classroom instruction during new hire training. A minimum score of 80% is required for satisfactory completion of the training program. *Your Instructor will coach/remediate as appropriate.* 

Connect/One upholds high standards of integrity. "Cheating" is not consistent with our Values and therefore is a terminable offense. Student misconduct during a test shall result in the confiscation of the test materials and referral to Employee Relations for separation from the Company.

In order to assure every opportunity for success in the program, it is important that you communicate to your instructor any special needs or reasonable accommodation that you require to participate in any aspect of the testing and assessment process or in order to perform the essential functions of the job.

It is your responsibility to be prepared for class on a daily basis with items such as your training guides, handout material, assigned tools, safety equipment, etc. Consistent with Connect/One's Values, you can expect to have the tools and equipment to perform your job. We expect you to care for and have available the training materials, manuals, tools and equipment that you were assigned. Repeated instances will result in referral to ER for corrective action.

# **History of Cable Television**

Cable television, formerly known as Community Antenna Television (CATV), was created in the mountains of Pennsylvania in the late 1940s. During this time, there were only a few television stations located mostly in larger cities like Philadelphia. People, who did not live in a city, or in a location where signals could be received easily, were unable to see television. A small town appliance storeowner had difficulty selling television sets to local residents because reception in the area was so poor.

The problem seemed to be the location of the town, which was in a valley and nearly 90 air miles from the Philadelphia television transmitters. Naturally, the signals could not pass through the mountain, and clear reception was virtually impossible, except on the ridges outside of town. To solve this problem, the shop owner placed an antenna on top of a large utility pole and installed it on the top of a nearby mountain. Television signals were received and transported over twin lead antenna wires down to the store. Once people saw these early results, television sales soared. It became his responsibility to improve the picture quality by using coaxial cable and self- manufactured "boosters" (amplifiers) to bring CATV to the homes of customers who bought television sets.

For many years, cable was simply a way to improve reception so people could see network broadcasts. It served as a community's antenna. Beginning in the early 1950s, systems experimented with microwave to bring the signals from distant cities. Because of the variety it offered to viewers, cable became more attractive and eventually moved into cities, as people wanted more viewing choice.

Perhaps the biggest event since cable began, and what many say is responsible for the rapid growth in the cable industry during the last decade, was the development of pay TV.

Pay television started with Home Box Office (HBO). Although HBO was viewed only by a few hundred people that first night, it has become the world's largest pay cable service with millions of viewers worldwide. HBO was the first programming service to use a satellite to distribute its programming. A signal is beamed from Earth to a satellite in a stationary orbit some 22,000 miles over the equator and bounced back to receivers on Earth. By distributing via satellite, HBO's signal is available to cable operators throughout North America.

Cable television today provides American viewers with greater variety in programming available. Because programming services available to cable are delivered via satellite, millions of Americans have access to the following:

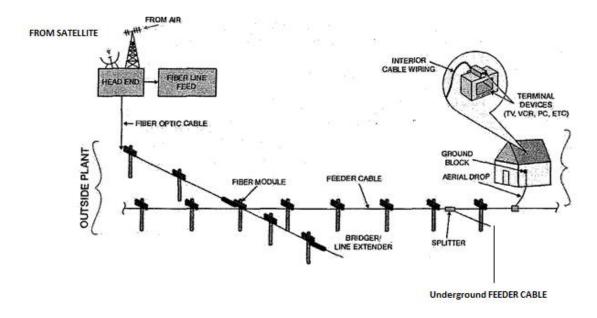
- 24-hour music channels (including Music Television, VH-1 and the Nashville Network)
- 24-hour sports channel (including ESPN, Sports Net New York, YES, MSG)

- 24-hour movie channels (including HBO, Showtime, Cinemax, Encore, Starz)
- 24-hour news channels (including CNN, Fox News Channel, and the Cable Satellite
- Public Affairs Network (C-SPAN)
- Children's programming (including Nickelodeon and The Disney Channel)
- Specialized programming (international-language channels and more)

Of course, not all local cable systems have these services available. The owner of a cable system determines the programming services offered to subscribers. Some systems have a very limited number of channels, but many can carry hundreds of different channels and allow for two-way communication between subscribers and the cable company. This two-way communication is made possible through the use of fiber optics.

### **Cable Systems**

The cable systems can be divided into three broad subsystems. The inside plant (headend), the outside plant and customer drop. These three subsystems work together to provide a variety of telecommunications services to the customer. Figure 1 shows the cable system components.



**Figure 1: Cable System Components** 

### **Inside Plant (Head-end)**

The primary function of the head-end is to house the electronics used to receive signals from a variety of sources, process and condition the signals, and transmit them over the cable system.

#### **Outside Plant**

The outside plant consists of the cable installed by MSO's. These cables transmit the signals to the customer over a single wire. The network is designed to transport radio frequency signals over great distances with high quality and reliability.

### **Customer Drop**

A tap performs the transition from the outside plant to the customer drop. The tap is used to pick up the signal and direct it to the customer's home. It is also the combination point for the return signal from the customer to the network.

### Safety

The most important aspect of your job as a field technician is SAFETY. Your safety and the safety of the subscriber are your prime responsibility. An installation exposes you to electrical, fall, vermin, breathing, and weather hazards, to name a few. Personal Protective Equipment (PPE), strict adherence to the safety procedures, and common sense prevent you from getting hurt or killed on the job. Attention to detail prevents the customer from being exposed to unsafe conditions.

- A fire could result from improper grounding of the drop system.
- A large potential voltage difference could result between the cable and the electrical service in a customer's home and could cause serious injury or death for anyone who completes the circuit.
- There is always the potential to fall when working from a ladder.
- Working in attics and basements can expose you to hazards such as dust, vermin, and hazardous chemicals.
- Foul weather can cause downed power lines and shorts between the high-voltage lines and the cable system.

Safety training will be presented in several modules throughout your New Hire curriculum, and will be reinforced throughout all training and hands on experiences you will encounter.

### **New Hire Training Process**

New Hire training is the first step in the Career Progression process of a Field Service Technician. As you gain experience and demonstrate achievement of knowledge, skills, and abilities at your current grade level, you will be provided opportunities for additional training and certification to progress in your career. Your Supervisor should be your main point of contact for discussions of your individual career progression path.

A Career Progression program is in place for all Field Operations Technicians. Movement from one grade level to the next is dependent on several factors, including:

- Time in Grade
- Performance Rating
- Certification

The path for Career Progression looks like this:

### Qualifications for Tier I Pay scale - must meet all criteria in order to maintain this pay scale

- Technician must maintain a 93.5% or better IVR post call average for the previous month.
- Technician must maintain 11% or lower repeat monthly average for the previous month.
- Technician must maintain a passing Home Health Check average of 90% or better for the previous month DBS Winback's & HHC must be 100% passing.
- Customer premises equipment (CPE) must be removed and/or picked up from subscriber when required. CPE must be returned to warehouse coordinator immediately and accounted for the following day.
- All materials/CPE not installed or utilized must be returned to warehouse within seven (7) calendar days from date of issuance.
- Must maintain zero damage complaints caused by technician negligence.
- o No EZ Pass, traffic violations or vehicle damage caused by technician negligence.
- Pass all Cablevision and/or Connect/One truck inspections.

### > Qualifications for Tier II Pay scale

- All employees that do not qualify for Tier I
- Any technician new or re-hired that has experience
- Any technician that does not comply with tier I for a duration of two weeks

### > Qualifications for Tier III Pay scale

- o This is considered our training/re-training probationary tier
- Any new-hire with little to no experience

- Any employee that does not adhere to the qualifications of Tier I or II for 2 consecutive months will receive Tier III pricing until criteria (for Tier II or I) is met
- Typical probationary period is 90 days however is to be determined by a qualified supervisor/trainer

### The Weeks Ahead:

The topic areas of your Field Technical Operations New Hire Program are as follows:

- Personal Safety, Ladder, HazCom
- Electrical Safety
- Signal Theory and Calculation
- Drop Certification
- Meters
- Tools & Materials
- Running an Aerial Drop
- Exterior & Interior Wiring
- Basic Troubleshooting
- Paperwork
- Customer Collections Skills
- Cable Service/Communication
- Smith/National Safety Council Driving
- Mentoring/Field Experience

### **PRODUCT OVERVIEW**

#### **Product Overview**

A brief introduction of our Major Service Operator (MSO) services is as follows. You will receive more details on each of these products as they are taught through the New Hire and advanced training programs.

### **Digital Television**

#### What is it?

For the past several years, our cable system MSO's has been preparing themselves, their assets and their customers for a revolutionary way of integrating televised programming, live entertainment and digital technology. Digital television is among the most robust in the world, allowing its broadband offerings, local programming, sports teams and entertainment venues to connect with households, schools, businesses and the community at large.

With digital network (which supports over 200 channels, lightening-fast Internet connections via cable modem and innovative programming) is expanding beyond traditional video services to deliver advanced, customized digital services, including high-definition (HDTV), video-on-demand, digital programming, interactive television, an interactive programming guide and e-mail service through the television all at the touch of a button. In addition to sharper, more brilliant images, crystal-clear digital sound and an expanded range of digital cable channels, this new suite of digital services gives customers more control over the television experience.

### **High Speed Internet**

#### What is it?

High Speed Internet is the fastest Internet access for the home. It is more than triple the speed of DSL and more than 150x faster than traditional dial-up services.

It connects customers to the Internet using the same cable that delivers cable TV service. The connection is always on, and doesn't tie up your phone line.

### **Voice-over Internet (VOIP)**

#### What is it?

VoIP is a high quality voice service that uses state-of art digital technology, the same technology; that delivers high speed internet access to the customer's home, to deliver high quality crystal clear voice service. Using the cable modem, VOIP offers unlimited local, regional and long-distance calling within the United States and Canada and popular calling features (including voicemail, call waiting, call forwarding and more) with an option to port the customer's existing Phone number over to VOIP.

### **Business Installs**

#### What is it?

These are products designed or modified for the small business customer.

- Digital Video For Business- to enable digital programming for lobbies, waiting rooms, conference rooms, including news programs, traffic and weather, Music Choice, and seasonal sports packages.
- High Speed Internet for smaller businesses requiring high-speed Internet access for four or fewer users, this broadband service is I 00 times faster than dial-up and four times faster than comparably priced DSL services. Small business customers get unlimited access for one low monthly fee.
- Voice-over Internet Protocol (VOIP) available for Business customers, this service provides unlimited local, regional and long distance calling within the US, Puerto Rico and Canada, plus premium calling features for one low, fixed per-line monthly rate, which could save our customers as much as 60% per month or more.