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# 10-451-101 061777 Introduction to Telecommunications Safety Procedures

**Course Outcome Summary** 

## **COURSE INFORMATION**

Alternate Title: Intro to Telecom Safety

Description:

10-451-101 INTRODUCTION TO TELECOMMUNICATIONS SAFETY PROCEDURES ...introduces the fundamental aspects of fall protection and rescue theory as well as practical applications of tower safety practices. Students will also learn about fall hazards, protection regulations, use and assessment of full body harnesses, and energy absorbing lanyards.

Instructional Level: 10

Total Credits: 3 Total Hours: 108

## **COURSE HISTORY**

Status: Active

Active Date: 5/23/2021

Last Revision Date: 8/20/2021 Revised By: SYSTEM IMPORT Last Approval Date: 1/3/2022

Approved By: Kristina Wendricks (15002977)

#### **COURSE COMPETENCIES**

 Practice general safety procedures in the workplace while identifying hazards according to OSHA/ANSI/Manufacturer's standards.

Status: Active

**Assessment Strategies** 

1.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 1.1. Pass OSHA 10
- 1.2. Pass Competent climber
- 1.3. Pass competent rigging
- 1.4. Rig in various scenarios around obstacles
- 1.5. Perform climbing up, down, and around a tower structure safely
- 1.6. Demonstrate OSHA practices
- 1.7. Identify appropriate circumstances for PPE
- 1.8. Remain 100% tied off at heights of 6' or higher

- 1.9. Explain OSHA requirements as they relate to the Telecom Industry and working at heights
- 1.10. Identify site hazards
- 1.11. Identify tower hazards

## **Learning Objectives**

- 1.a. Identify various hazards on tower site
- 1.b. Follow climbing and rigging hierarchy of rules
- 1.c. Apply OSHA standards to industry
- 1.d. Obtain OSHA 10 Certification
- 1.e. Explain OSHA requirements as they relate to the Telecom Industry and working at heights

## 2. Practice safety procedures for equipment including Lockout/Tagout procedures.

Status: Active

## **Assessment Strategies**

2.1. Skill Demonstration

#### Criteria

- 2.1. Complete online Lockout/Tagout Certification
- 2.2. Inspect personal equipment
- 2.3. Check others equipment before climbing
- 2.4. Inspect tools before each use
- 2.5. Clean and properly store climbing gear and tools
- 2.6. Tag and label damaged equipment

## **Learning Objectives**

- 2.a. Use Lockout Tagout procedures
- 2.b. Inspect safety and rigging equipment
- 2.c. Properly dispose of damaged or broken equipment
- 2.d. Perform maintenance on safety and rigging equipment

#### 3. Perform a self-rescue.

Status: Active

#### **Assessment Strategies**

3.1. Skill Demonstration

#### Criteria

Learners will be successful when they are able to:

- 3.1. Pass written exams
- 3.2. Tie various knots
- 3.3. Perform self-rescue with foot loop
- 3.4. Perform self-rescue with ascender
- 3.5. Perform self-rescue with prusik knot

## **Learning Objectives**

- 3.a. Obtain climbing certification
- 3.b. Obtain elevation rescue certification

## 3.c. Complete several self-rescue techniques

## 4. Perform a companion rescue.

Status: Active

**Assessment Strategies** 

4.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 4.1. Pass written exams
- 4.2. Tie various knots
- 4.3. Perform rescue from above
- 4.4. Perform descent rescue
- 4.5. Perform a team rescue with prusik knot

**Learning Objectives** 

- 4.a. Obtain climbing certification
- 4.b. Obtain elevation rescue certification
- 4.c. Complete several companion rescues

## 5. Implement different kinds of rigging plans.

Status: Active

**Assessment Strategies** 

5.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 5.1. Calculate rigging forces
- 5.2. Create rigging plans
- 5.3. Utilize proper rigging terminology
- 5.4. Tie various knots
- 5.5. Rig various weight reducing systems
- 5.6. Ascend object up the tower
- 5.7. Descend object down the tower
- 5.8. Tag an object around obstacles

**Learning Objectives** 

- 5.a. Obtain Rigging Certification
- 5.b. Rig in multiple scenarios
- 5.c. Develop rigging plans

## 6. Evaluate Maximum Permissible Exposure limits of Radio Frequencies.

Status: Active

**Assessment Strategies** 

6.1. Skill Demonstration

#### Criteria

Learners will be successful when they are able to:

- 6.1. Pass written Exam
- 6.2. Use RF meters to find High levels of RF
- 6.3. Identify RF levels at various distances
- 6.4. Work safely around various types RF equipment

## **Learning Objectives**

- 6.a. Obtain RF awareness certification
- 6.b. Identify various RF levels
- 6.c. Measure RF levels
- 6.d. Describe MPE limits

## 7. Safely operate capstan hoist to prevent accidents.

Status: Active

**Assessment Strategies** 

7.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 7.1. Pass capstan training test
- 7.2. Setup a capstan to hitch mount
- 7.3. Raise and Lower objects to specified heights
- 7.4. Inspect capstan and components

## **Learning Objectives**

- 7.a. Obtain Capstan Operations Certification
- 7.b. Identify the Capstan size, power source and components
- 7.c. Set up capstan hoist
- 7.d. Inspect capstan hoist

## 8. Demonstrate basic first aid/blood borne pathogens and CPR procedures.

Status: Active

**Assessment Strategies** 

8.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 8.1. Perform CPR
- 8.2. Pass CPR exam
- 8.3. Pass First AID exam
- 8.4. Pass Blood borne Pathogens online course
- 8.5. Assess post rescue first AID
- 8.6. Perform First AID on simulated victim

## **Learning Objectives**

- 8.a. Complete CPR/First AID certificate
- 8.b. Complete Blood Borne Pathogens Certificate
- 8.c. Perform post rescue first aid

## 9. Complete job safety hazard analysis (JHA) and rescue plans.

Status: Active

**Assessment Strategies** 

9.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 9.1. Identify site hazards
- 9.2. Identify steps to mitigate hazards
- 9.3. Look up local hospital, police station and fires station phone number and coordinates
- 9.4. Identify current location by address and GPS coordinates
- 9.5. Complete a rescue plan scenario

**Learning Objectives** 

- 9.a. Complete daily JHA form
- 9.b. Create site Recue Plan

## 10. Follow proper crane and traffic control principle.

Status: Active

**Assessment Strategies** 

10.1. Skill Demonstration

Criteria

Learners will be successful when they are able to:

- 10.1. Caution tape off a section of parking lot
- 10.2. Set up cones to redirect traffic
- 10.3. Set caution cones out around a work vehicle
- 10.4. Perform basic crane operation hand signals
- 10.5. Identify communication through handheld radios
- 10.6. Lift and lower objects using crane hand signals to communicate
- 10.7. Lift and lower objects using handheld radios to communicate

**Learning Objectives** 

- 10.a. Implement traffic controls
- 10.b. Communicate with crane operator through hand signals
- 10.c. Communicate with radios to team members