

TO: Safety Contacts for Rodeo Participants

FROM: NCAMES Safety & Training Committee

SUBJECT: NCAMES 25th Annual Lineman's Rodeo / NCAMES Conference

DATE: February 15, 2024

We are pleased to announce the NCAMES 25th Annual Lineman's Rodeo to be held in Concord, North Carolina on May 9, 2024. Please find attached the Rodeo Packet.

To participate in the rodeo, please ensure that each participant's entry form, release, and waiver agreement are completed by their supervisor and returned to Darryl Strother, NCAMES Safety and Training Chairman, at [Darryl.strother@rockymountnc.gov](mailto:Darryl.strother@rockymountnc.gov) no later than **April 15, 2024**. Additionally, each participant must complete a NCAMES conference registration form and submit payment. That form and payment should be sent to Gail Boggs, Secretary/Treasurer for NCAMES, at [gail.boggs@faypwc.com](mailto:gail.boggs@faypwc.com) no later than **April 1, 2024**. Please have your supervisor sign and return the checklist at the end of this form.

The conference this year will feature a lineman(field) track and a technical(engineering) track. The speakers are considered experts in their field, and these sessions will be a tremendous opportunity to hear about the latest developments in the industry. Topics and speakers include:

- Changes in the 17 APPA safety manual
- North Carolina Highway patrol
- Round table for linemen only experience sharing etc
- Substation security
- Other topics

The conference registration is coordinated by Gail Boggs, Secretary/Treasurer for NCAMES. Any questions related to the conference should be directed to Gail Boggs at (910) 223-4516 or [gail.boggs@faypwc.com](mailto:gail.boggs@faypwc.com).

For information on Rodeo events and/or to download a packet go to: <http://www.ncames.com>. Any Rodeo Event questions will be answered by the NCAMES Safety & Training Committee and posted on the facebook page. You will need to register online by requesting membership. This is a closed group and admitted by answering industry questions website. This change is for security/privacy reasons.

The overall first thru fifth place Apprentice and Journeyman, will be recognized this year with a post type trophy. The first thru third place Apprentice and Journeyman event winners, will be recognized this year with an acrylic trophy. The Mutual Aid event prize is to be determined. Winners will be based on the lowest score first and fastest time as a tie breaker.

## ***NCAMES 25th ANNUAL LINEMAN'S RODEO***

The NCAMES 25th Annual Lineman's Rodeo will be held in Concord, NC, at the **Cabarrus Arena Events Center** located at **4751 Hwy 49 North – Concord, NC**. The awards presentation will be held later that evening at the NCAMES Social and Annual Meeting.

**No entries or changes in participants will be accepted after this date so that other logistics can be coordinated for the Rodeo.**

**PLEASE COMPLETE THE CHECKLIST AND HAVE YOUR SUPERVISOR SIGN AND DATE IT. SEND IT IN WITH ALL FORMS**

**\*\*\* All Events will be judged as Energized under Real Working Conditions \*\*\***

**\*\*\* All Events will be judged from the APPA Safety Manual - 17th Edition \*\*\***

Attached are the following forms and guidelines:

1. Rodeo agenda
2. Entry release form
3. General Rules
4. Eligibility requirements
5. Event descriptions
6. Entry forms for participants

## General Rules

1. All safety rules shall be observed during the rodeo events. All events will be judged from the APPA Safety Manual 17th Edition.
2. Competitors must compete in all events of their classification (e.g. Journeyman, Apprentice). Failure to compete in all events will result in disqualification from the rodeo competition.
3. Only one ground man will be allowed per Journeyman lineman.
4. All rodeo events will be judged as energized under real working conditions.
5. Each competitor must provide their own equipment (unless specified to be provided in an event). Please make sure that your tools are clearly marked with your name for identification. Each competitor must have the following equipment/tools as a minimum:
  - Climbers
  - Belt
  - Safety strap
  - Hard hat
  - 100% fall arrest, (fall arrest is required; if a contestant does not have fall arrest they may sign one out from NCAMES/ELECTRICITIES)
  - Approved safety glasses with side shields
  - 100% cotton or flame-retardant long-sleeved shirt
  - Hand tools
  - Leather gloves with two-inch cuff (minimum)
  - Knife (no razor knife)
  - 20 kV rubber gloves and protectors
  - Hot sticks, hand line, etc.
6. A Journeyman Lineman is defined as any person that is a Journeyman Lineman, Line Technician, Crew Foreman, or equivalent classification employed by a NCAMES member city within the State of North Carolina. The Journeyman Lineman must be a permanent fulltime employee of the city represented.
7. An Apprentice lineman is defined as any person that has four years or less in line work. An Apprentice line worker that has been an Apprentice for more than four years cannot compete in the Apprentice line worker events and must compete in Journeyman line worker events. The Apprentice line worker must be employed by a NCAMES member city within the State of North Carolina and be a permanent full-time employee of the city represented.
8. There will not be any rodeo events where an aerial bucket can be used by competitors.
9. Each competitor shall sign the liability release form prior to competing in the rodeo events.

10. Contestants will be scored on the following:
  - Safety Procedures
  - Work Practices
  - Equipment Handling
  - Timely Completion of the event
11. The judges for NCAMES Rodeo are members of the NCAMES Safety and Training Committee, operating utility supervisors and past rodeo participants. We welcome and encourage judges from all participating utilities. Judges are not allowed to judge competitors from their own utility system.
12. Any competitor found to be in violation of any of the following conditions will be disqualified immediately:
  - Arguing with a judge or exhibiting improper or discourteous conduct toward a judge or other competitor.
  - Failure to compete in all events.
  - Tools found altered at competition.
13. Each Competitor shall furnish all of the following tools and safety equipment: climbers, belt, safety strap, approved city issued hard hat, 100% fall arrest, (fall arrest is required; if contestant does not have fall arrest they may borrow one from Electricities/NCAMES), safety glasses with side shields, 100% cotton or flame-retardant long sleeved shirt, hand tools, knife, hotline tools and cover, 20 kV rubber gloves, leather work gloves, and protectors. Be sure to mark all of your tools for easy identification. Competitors are solely responsible for their own tools. All tools will be inspected prior to use. All climbing gear must conform to current ANSI and OSHA standards.
14. Electricities/NCAMES will provide hand lines for the Hurtman Rescue. All other tools are the responsibility of each competitor (unless noted on the specific event).
15. No homemade, modified, or altered tools will be allowed.
16. Competitors can ask the event judge questions before the event begins but not during the event. The judge may be asked to clarify any questions before the event begins. It is the competitor's responsibility to ask questions. You will have a maximum of five (5) minutes to ask questions and lay out your tools.
17. Video footage will not be allowed to settle judging disputes.
18. The decision of the Chief Judge is final. Competitors may contest a deduction to the Event Judge. Any disputes that cannot be resolved by the Event Judge may be brought to the Chief Judge. The competitor may request that the Event Judge notify the Chief Judge of the dispute before he/she leaves the event. All disputes must be settled before the competitor leaves that rodeo event. After the competitor leaves the event, the deduction can no longer be contested. The Chairman of the NCAMES Safety and Training Committee will serve as the Chief Judge.

**\*\*\*Be advised that any dispute that is not overturned by the Chief Judge will result in a 10-point penalty**

**\*\*\***

19. Velcro straps are allowed on climber pads, if they are used as manufactured. No modifications, such as cutting the Velcro shorter, will be allowed.

20. Only approved safety glasses or approved prescription safety glasses will be accepted for use in the rodeo competition with the ANSI Z87.1 stamp on the safety glass frames.
21. Battery, Hydraulic, and Power tools are not allowed to be used by competitors.
22. Competitors are allowed to use hard line cover.
23. All competitors shall use full fall arrest while climbing during the rodeo competition.
24. The minimum manufactured blanket size is 22-inches x 22-inches.

\*\*\*\*\***NOTICE OF CHANGE**\*\*\*\*\*

There will not be a Question-and-Answer Session at the NCAMES Rodeo this year. All questions will be asked and answered online at the NCAMES Q&A Forum. All questions will be answered online until two weeks before the NCAMES Rodeo. The rodeo is on 5/9/2024, therefore the last day to ask questions online is 4/25/2024.

**All competitors will be required to attend classes / break-out sessions on Wednesday. A sign in sheet will be present and sent to Directors/Managers of each city/town.**

# Infraction Definitions

The following are definitions for the infractions listed on the score sheets. These are the most common infractions.

## General Infractions

### 2-Point Infractions

#### PPE MUST BE WORN AT ALL TIMES WHILE INSIDE RODEO EVENT AREA

##### **Hardhat, safety glasses, leather work gloves, and work boots**

- Failure to cover neutral, secondary or primary properly: All potentially energized conductors must be fully covered with protective cover when within reach, fall, or slip of energized conductor.
- Safety strap and fall arrest infraction: Safety strap must be in control at all times. Both snaps of safety must be hooked on a D-ring while climbing the pole. The safety strap may be carried on the shoulder; however, both snaps must still be in a D-ring. If the safety strap slides off the shoulder, the contestant will receive a deduction. After using secondary fall arrest to cross obstacle, primary fall arrest must be reattached to the pole before continuing to climb.
- Improper hand line operation: The lines of the hand line must not be twisted while raising or lowering tools or material. All tools and material must be raised and lowered on the hand line. The hand line may be hung above the neutral before cover-up only if there are no secondary conductors to reach over, and the uncovered neutral is not touched by any part of the hand line or hand without rubber gloves.
- Dropping tools or materials from pole: Climbers cannot drop tools or materials from the pole.
- Misuse of tools or the use of the wrong tool: Tools must be used for their intended purpose and not altered from manufactures' specifications.
- Extended body contact with covered neutral: The body cannot have more than brush contact with the covered neutral.
- Failure to maintain proper clearance from energized conductors or parts: Journeyman must maintain proper clearance\* from exposed energized primary conductors or parts with all parts of the body except the rubber-gloved hand. This would include any un-insulated tools attached to the energized primary conductor.

\*Proper clearance is defined as within reach or fall of exposed energized conductors.

- Cutout or slip on pole: A Cutout or slip is defined as one or more gaffs out of the pole and sliding on the surface of the pole out of control.
- Failure to wear hard hat properly at all times (not backwards).
- Failure to wear long sleeve shirt, sleeves down and buttoned long-sleeve shirts are required. If shirt has buttons on the sleeve, they must be buttoned. Sleeves cannot be pushed or rolled up.
- Dropping or losing hard hat: Hardhats must be worn at all times while inside the event area.
- Hanging tools or materials on structure, conductor or safety strap: Tools or materials can only be hung on the hand line or approved devices.

Infractions that have a low occurrence and listed on the other infraction list of definitions will be shown here with a brief description.

### **10-Point Infractions**

- Contact with energized conductor: Contact with uncovered primary or neutral conductor with any body part except rubber gloved hands.
- Losing control or dropping conductor: Losing control of a conductor is defined as being unable to hold the conductor in position without touching the pole, other conductors or dropping completely.
- Walking in Climbers.
- Gaff Guards not on Climbers while inside Rodeo Area.
- Improper use of fall arrest.
- Disputes that are taken to the Chief Judge: Any dispute that is taken to the Chief Judge will result in a 10-point penalty if the dispute is not overturned.

# ++Attention++

## Two changes to this year's Rodeo in Concord.

1. All competitors – Journeyman and Apprentice – will be required to participate in the written Safety Manual Test. The test will consist of 25 questions taken from the 17<sup>th</sup> Edition of the APPA Safety Manual. Each missed question will result in a four-point deduction. This will also be a timed event.
2. A new scoring format will be implemented. It will consist of each competitor being given points for the position in which they finished in **each event**. The competitors who receive the **least** amount of **total points** will be the winners.

### Example:

**Competitor 1** finishes in 5<sup>th</sup> place in event one receives 5 points, 8<sup>th</sup> place in event two receives 8 points, 1<sup>st</sup> place in event three receives 1 point, 4<sup>th</sup> place in event four receives 4 points and 6<sup>th</sup> place in event five receives 6 points for a total of **24 points**.

**Competitor 2** finishes 1<sup>st</sup> place in event one receives 1 point, 1<sup>st</sup> place in event two receives 1 point, 2<sup>nd</sup> place in event three receives 2 points, 3<sup>rd</sup> place in event four receives 3 points and 15<sup>th</sup> place in event five receives 15 points for a total of **22 points**.

Competitor 2 would finish higher than competitor one.



## **JOURNEYMAN/APPRENTICE EVENT**

### **WRITTEN TEST**

**MEAN TIME: 25 MINUTES**

**DROP DEAD TIME: 30 MINUTES**

1. **Read General Rules (Pages 2-6) Carefully.**
2. **Test Starts Promptly at 3:30pm Wednesday May 8th-- Late competitors will be disqualified.**
3. This year's test is **OPEN** book. The **ONLY** book allowed is the APPA Safety Manual - 17th Edition.
4. This will be a written test compiled of 25 questions.
5. The questions will come from the APPA Safety Manual - 17th Edition.
6. The questions will be multiple-choice.
7. All competitors will take the test the day before the Rodeo begins at a designated area.
8. All wrong answers will count minus 4 points each.
9. **Time starts** at Judge's signal.
10. **Time stops** when competitor lays down their pencil(s) and says "TIME".
11. Time in this event will be used in the case of a **tiebreaker only**. Time will "not" be calculated into the overall time of the other Rodeo events.
12. Supplemental material will "NOT" be allowed during this event!!!! This includes any study guides, online resources, cell phones, etc. **Failure to abide by this guideline will result in immediate disqualification from the Rodeo!!!!**

THE JOURNEYMAN/APPRENTICE LEVEL TEST WILL COME FROM THE APPA SAFETY MANUAL - 17th EDITION

**\*\*Test Scores will be released at the conclusion of the NCAMES Rodeo.\*\***

**2 - #2 Pencils will be provided**

**JOURNEYMAN/APPRENTICE EVENT**  
**VERTICAL HURTMAN RESCUE**

***Mean Time: 4 minutes***  
***Drop Dead Time: 8 minutes***

**Event Summary:**

- This event will be on a 40' pole with mannequin hanging approximately 5' from the top.
- This is an individual event. Competitor will be given five (5) minutes to set up and ask questions.
- The Competitor must wear rubber gloves ground to ground.
- The hand line will be on the mannequin's belt
- The Competitor will split the hand line and wrap around the pole a minimum of one turn. There will be a bolt through the pole approximately 5" long sticking out of the pole. Bolt will be two feet directly above the mannequin's head simulating a screwdriver or clevis bolt.
- The rope will be run under the mannequin's arms and tied with three half hitches (the splice cannot be part of the knot).
- The Competitor must call "HEADACHE" before they drop the sheave and rope.
- Competitor will cut the insert rope and then lower the mannequin to the ground.
- The Competitor must attempt to keep the mannequin off the pole and hardware. There will be **NO** gigs for incidental contact of the mannequin and the pole.
- The mannequin must hit the ground gently as if it were a real person.
- Competitor must make an adjustment at least once on their fall arrest to be in safe compliance
- **Time will stop** when the Competitor has returned to the ground with both feet on the ground.

**Event Specifications:**

- **Time starts** at Judge's signal with the Competitor at least an arm's length from pole.
- All rubber gloves will be in glove bag cuffs down with no fingers protruding.
- Competitors belt and hooks will be on the ground.
- **Time will stop** when Competitor has both feet on the ground.
- Competitor must stay in 5-foot circle while they have gaffs on.
- Competitor must cut the insert. There will be a 10-point deduction for cutting the belt in the wrong place.
- The blade of the climber's knife must not be exposed while climbing.
- Judges will use a 4" PVC conduit between the rope and the mannequin to evaluate the rope knot and the eye splice cannot be in any part of the knot.

**JOURNEYMAN/APPRENTICE EVENT  
VERTICAL HURTMAN RESCUE**

**JUDGING GUIDELINES**

Name: \_\_\_\_\_ City: \_\_\_\_\_

ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC 2-POINT DEDUCTION

**Infractions That Cause a 2-Point Deduction**

- Failure to wear rubber gloves from ground to ground \_\_\_\_\_
- Dropping tools or materials from the pole (each occurrence) \_\_\_\_\_
- Cutout or failure to maintain control (Fall Arrest prevents fall) \_\_\_\_\_
- Failure to wear hardhat properly at all times (not backward) \_\_\_\_\_
- Failure to wear long sleeve shirt; sleeves rolled down and buttoned \_\_\_\_\_
- Dropping or losing hardhat \_\_\_\_\_
- Failure to control descent of dummy \_\_\_\_\_
- Failure to use three half hitches when tying rope around dummy's chest \_\_\_\_\_
- Eye splice should not be used as part of the half hitches \_\_\_\_\_
- Dummy not lowered in designated area \_\_\_\_\_
- Twisted hand line operation \_\_\_\_\_
- Failure to call "HEADACHE" when dropping sheave \_\_\_\_\_
- Failure to drop sheave in wood chips \_\_\_\_\_
- Rubber gloves not in glove bag when not in use \_\_\_\_\_
- Exceeding mean time of 4 minutes for the event \_\_\_\_\_
- Failure to make an adjustment on fall arrest \_\_\_\_\_
- Other \_\_\_\_\_

**Infractions That Cause a 10-Point Deduction**

- Arguing with judges/Improper conduct \_\_\_\_\_
- Improper use of fall arrest \_\_\_\_\_
- Cutting belt in wrong place \_\_\_\_\_
- Dummy hitting ground too hard \_\_\_\_\_
- Walking in climbers \_\_\_\_\_
- Failure to wear approved safety glasses with side shields \_\_\_\_\_
- Dispute with Chief Judge that is not Overturned \_\_\_\_\_
- Exceeding mean time of 8 minutes for the event \_\_\_\_\_
- Other \_\_\_\_\_

**After 8 minutes, competitor's time will be disqualified, and no time will be allowed for this event.**

**Time: Min: \_\_\_\_\_ Sec: \_\_\_\_\_**

**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name: \_\_\_\_\_**



***JOURNEYMAN/APPRENTICE EVENT***

***Egg Climb with a Twist***

***MEAN TIME: 6 MINUTES***

***DROP DEAD TIME: 8 MINUTES***

This event will consist of competitor first pulling up a 50 lb weight using a handline until the red tape goes over the sheeve of the block. He must then let the weight down in a controlled manner. The weight must hit the ground softly. He must then put on his climbing equipment and climb a 40 ft. pole with an egg in his mouth and climbs to the top of the pole. Competitor must place the egg in small nut bag (at the end of a 8 ft. cross arm), climb back down pole, remove his hooks and using provided extendo stick lineman must bring small nut bag to the ground retracting stick fully. He must then place the egg in provided container then replace nut bag back to arm with extendo stick and fully retract stick and place it on the tarp.

1. Competitor will be allowed a 5 minute setup time before starting the event and to ask questions.
2. Time starts at the Judges' signal.
3. Leather Gloves must be worn the entire event.
4. Fall arrest may be installed on pole during set up.
5. Belt may be worn while running handline, but climbers cannot.
6. Climbers must be removed when lineman returns to the ground and gaff guards reinstalled.
7. Time stops when extendo stick is fully retracted and laying on tarp.
8. Competitor must make an adjustment at least once on their fall arrest to be in safe compliance

**JOURNEYMAN/APPRENTICE EVENT**  
*Egg Climb with a Twist*  
**JUDGING GUIDELINES**

Name \_\_\_\_\_ City \_\_\_\_\_

**ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC  
10-POINT DEDUCTION.**

**INFRACTIONS THAT CAUSE A 2-POINT DEDUCTION**

Dropping of Nut Bag	_____
Dropping or losing hard hat	_____
Failure to wear a hard hat properly at all times (not backward)	_____
Failure to wear long sleeved shirt; sleeved rolled down and buttoned	_____
Exceeding mean time of 6 minutes for this event	_____
Misuse or throwing Extendo Stick	_____
Lowering weight in an uncontrolled manner	_____
Allowing weight to hit the ground hard (dropping weight)	_____
Cut- Out of pole (Uncontrolled slip-fall arrest catches competitor)	_____
Failure to make an adjustment on their fall arrest	_____
Cracked or broken egg	_____
Other _____	_____

**INFRACTIONS THAT CAUSE A 10-POINT DEDUCTION**

Fall from pole resulting in competitor hitting ground	_____
Failure to wear leather gloves at all times	_____
Arguing with judges/Bad conduct	_____
Failure to wear approved safety glasses with side shields	_____
Exceeding drop dead time of 8 minutes	_____
Dispute with Chief Judge that is not overturned	_____
Other _____	_____

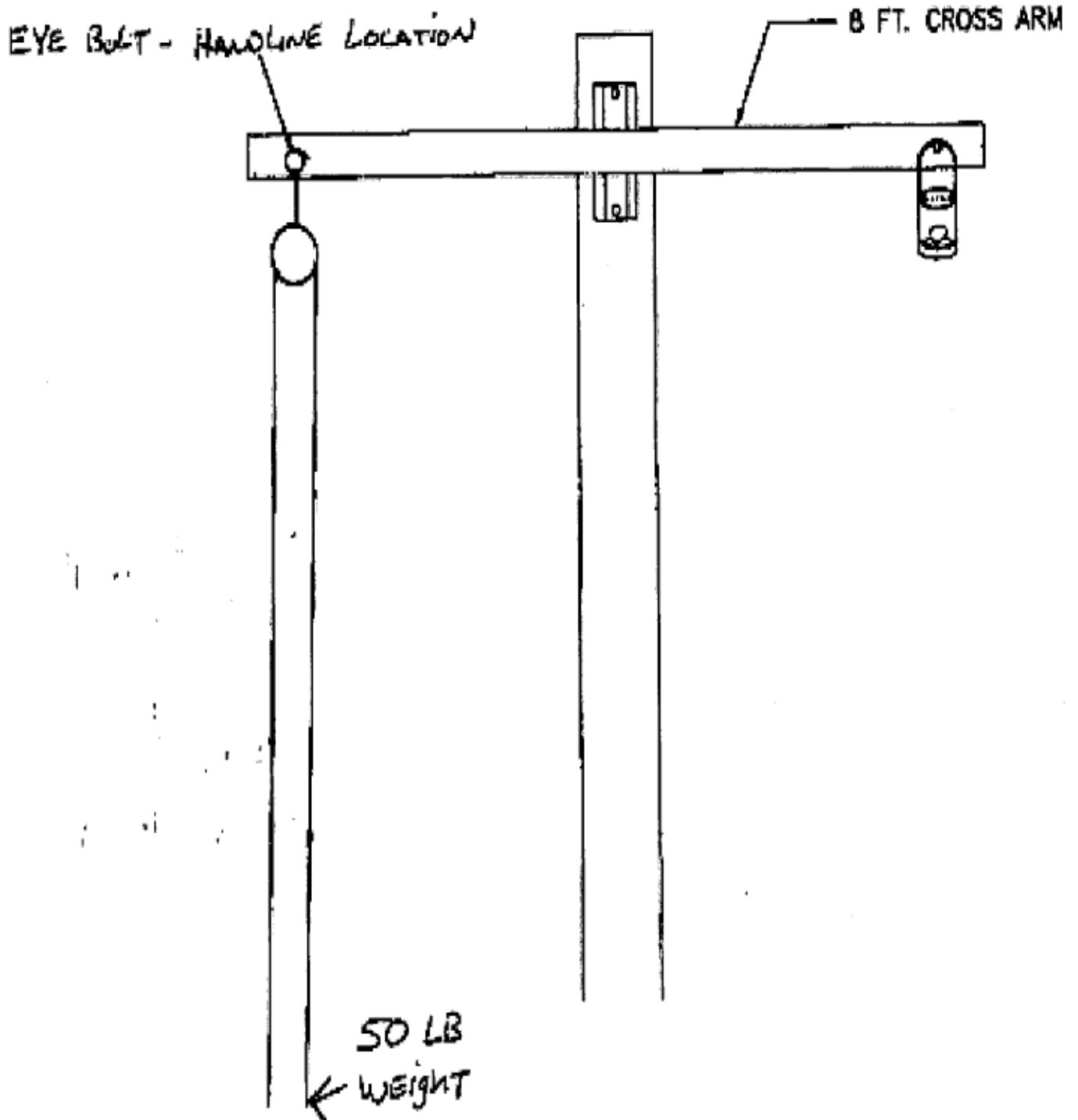
**\*After 20 minutes competitor's time will be disqualified and no time will be allowed for this event.**

**Time: Min: \_\_\_\_\_ Sec: \_\_\_\_\_**

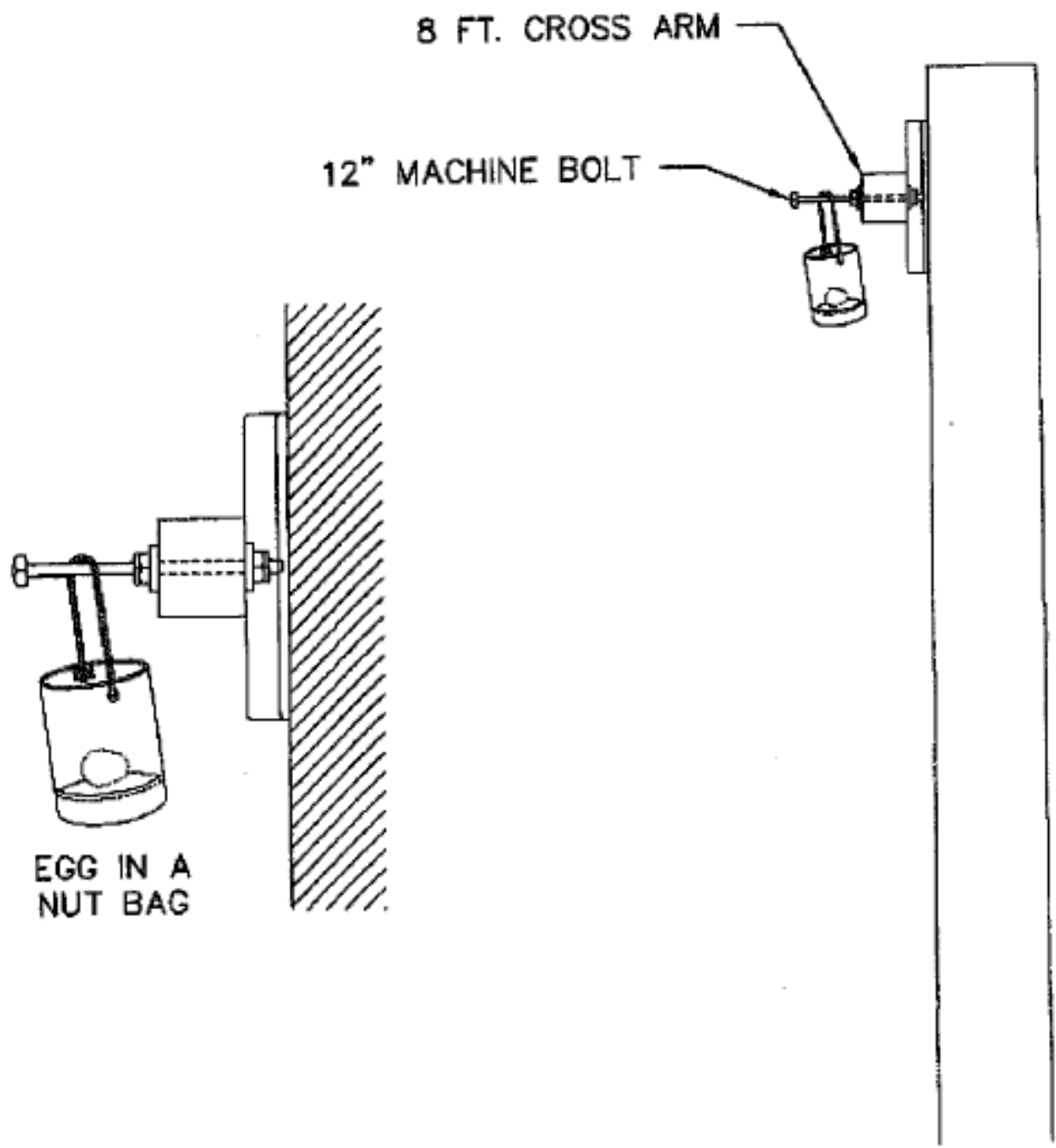
**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name: \_\_\_\_\_**

EGG CLIMB WITH A TWIST  
40 FT. POLE  
8 FT. CROSS ARM



EGG CLIMB WITH A TWIST  
40 FT. POLE  
8 FT. CROSS ARM





**APPRENTICE EVENT**

**ROPE TOSS AND CONDUCTOR TIE**

*Mean Time: 3 minutes*

*Drop Dead Time: 5 minutes*

**Event Summary:**

The competitor will throw a 3/8" rope over a 10' wooden cross arm mounted on a 35' wooden pole. The competitor will then tie the rope to a 20' coil of #2 ACSR conductor using a rolling bend knot. The other end of this conductor will be tied off to an existing anchor. The competitor will then pull the conductor tight over the arm and tie off rope to anchor using a bowline on a bight and two snub hitches.

Ropes and coils of conductors will be provided and laid out at the event stations. The specified knots are the only knots that will be accepted and may be found in the Lineman's Handbook.

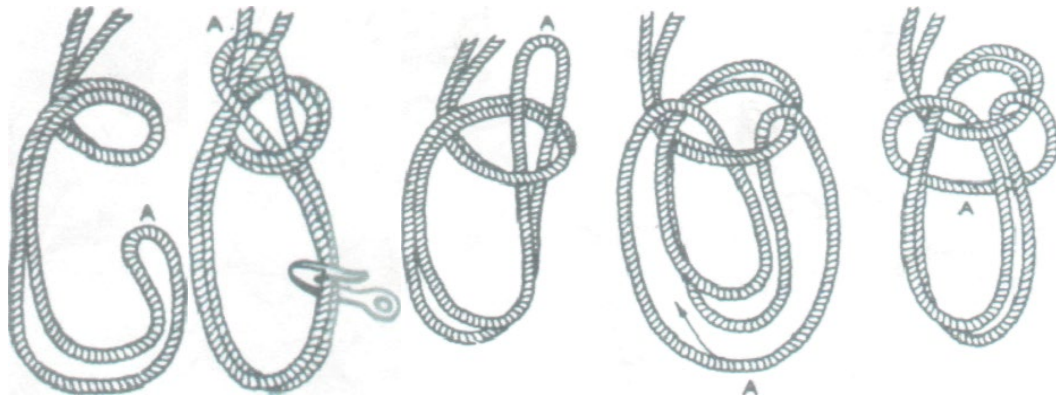
**Construction Details:**

- a. Pole: 35 foot wood pole – approximate height in ground will be 28'.
- b. 8 foot standard wood cross arm with Pin Type Insulators
- c. Conductor: #2 ACSR Bare Strand.
- d. Rope: 3/8" - 12 strand single braid.
- e. Anchors will be located 12' from pole.
- f.

**Event Specification:**

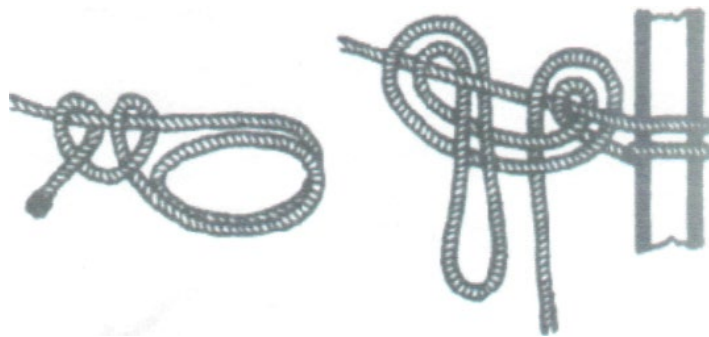
1. The apprentice will be allowed a five (5) minutes set-up time before starting the event.
2. Gloves are required for the duration of the event and during preparation and cleanup.
3. Event timing begins when the judge signals the apprentice to begin
4. The rope may be thrown from either side of the pole as long as it is thrown over the arm.
5. Conductor shall be pulled taught and all knots shall be tied correctly.
6. Time stops when the last snub hitch is tied.
7. Cross arm will be located at 28' on the pole.

## These are the only knots that will be accepted

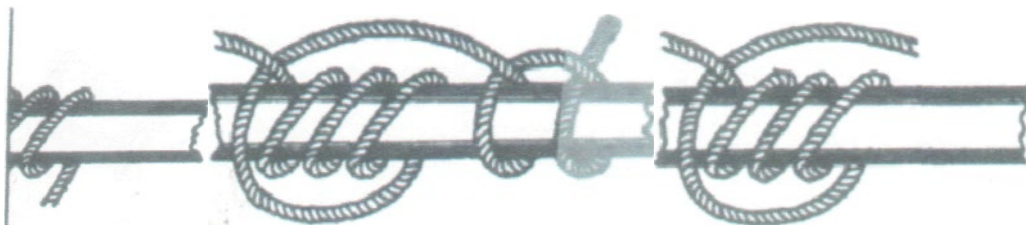


Bowline on a bight. The bowline on a bight is used to place a loop in a line somewhere away from the end of the rope. It can be used to gain mechanical advantage in a rope guy by doubling back through the bowline on a bight much as a set of blocks.

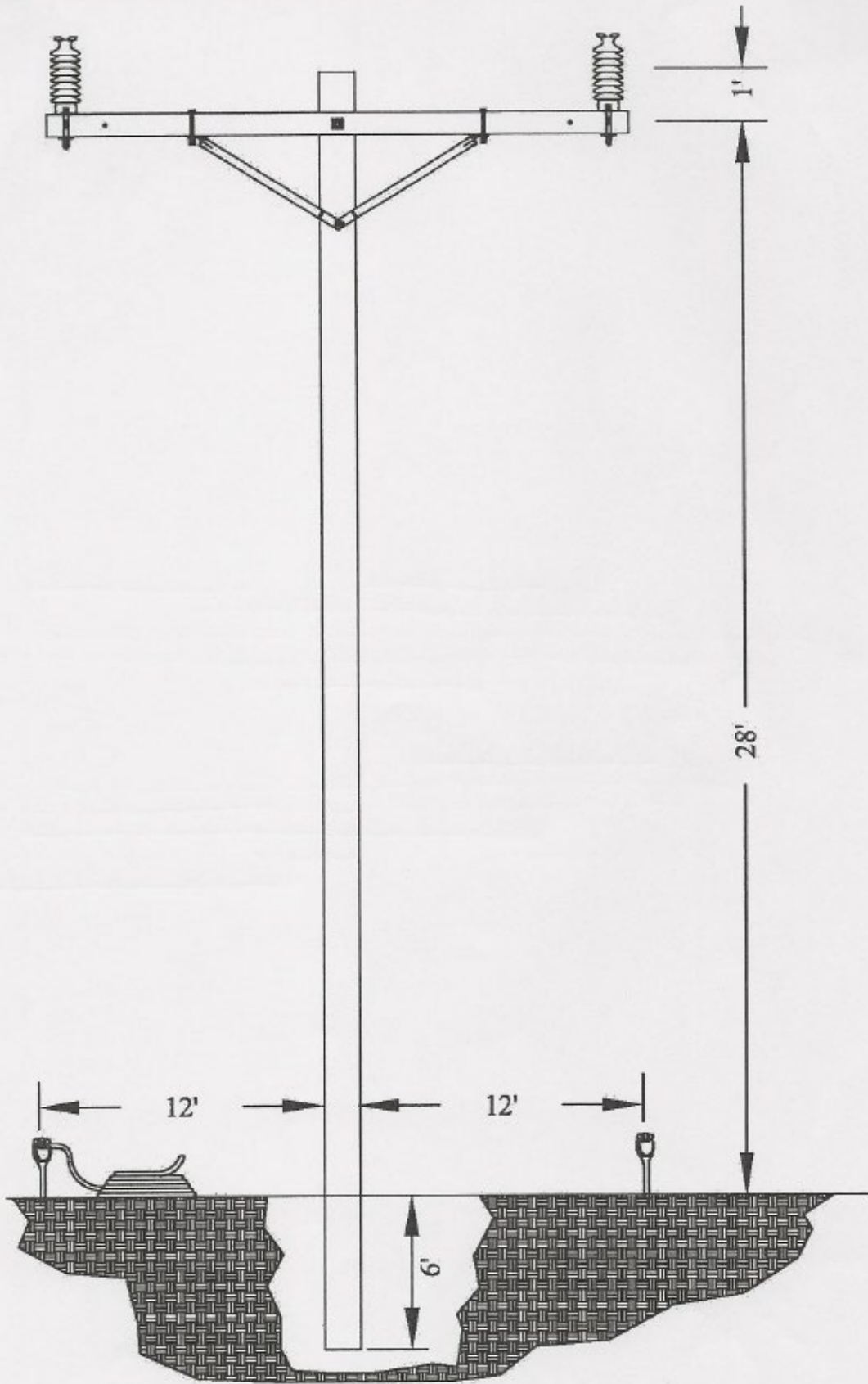
To tie this bowline, take the bight of the rope and proceed as with the simple bowline: only instead of tucking the end down through the bight of the knot, carry the bight over the whole and draw up, thus leaving it double in the knot and double in the standing part. The loop under the standing part is single. Draw it tight.



**FIGURE 43.24** Snubbing hitches. Knots used for attaching a rope for anchoring or snubbing purposes.



APPRENTICE ROPE TOSS & CONDUCTOR TIE OFF



**APPRENTICE EVENT**

**ROPE TOSS and CONDUCTOR TIE**

**JUDGING GUIDELINES**

Name \_\_\_\_\_ City \_\_\_\_\_

**ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC**

**10 POINT DEDUCTION.**

**INFRACTIONS THAT CAUSE A 2 POINT DEDUCTION**

- Failure to wear leather gloves \_\_\_\_\_
- Improperly tied knots (per knot) \_\_\_\_\_
- Misuse of tools or use of the wrong tools \_\_\_\_\_
- Failure to wear a hard hat properly at all times (not backward) \_\_\_\_\_
- Failure to wear long sleeved shirt; sleeves rolled down and buttoned \_\_\_\_\_
- Dropping or losing hard hat \_\_\_\_\_
- Exceeding mean time of 5 minutes for this event \_\_\_\_\_
- Failure to yell "**HEADACHE**" when throwing rope \_\_\_\_\_
- Other \_\_\_\_\_

**INFRACTIONS THAT CAUSE A 10-POINT DEDUCTION**

- Arguing with judges/Bad conduct \_\_\_\_\_
- Failure to wear approved safety glasses with side shields \_\_\_\_\_
- Exceeding drop dead time of 7 minutes \_\_\_\_\_
- Other \_\_\_\_\_

**Time: Min: \_\_\_\_\_ Sec: \_\_\_\_\_**

**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name: \_\_\_\_\_**

# **APPRENTICE EVENT**

## **TRANSFORMER LOAD SWITCHING**

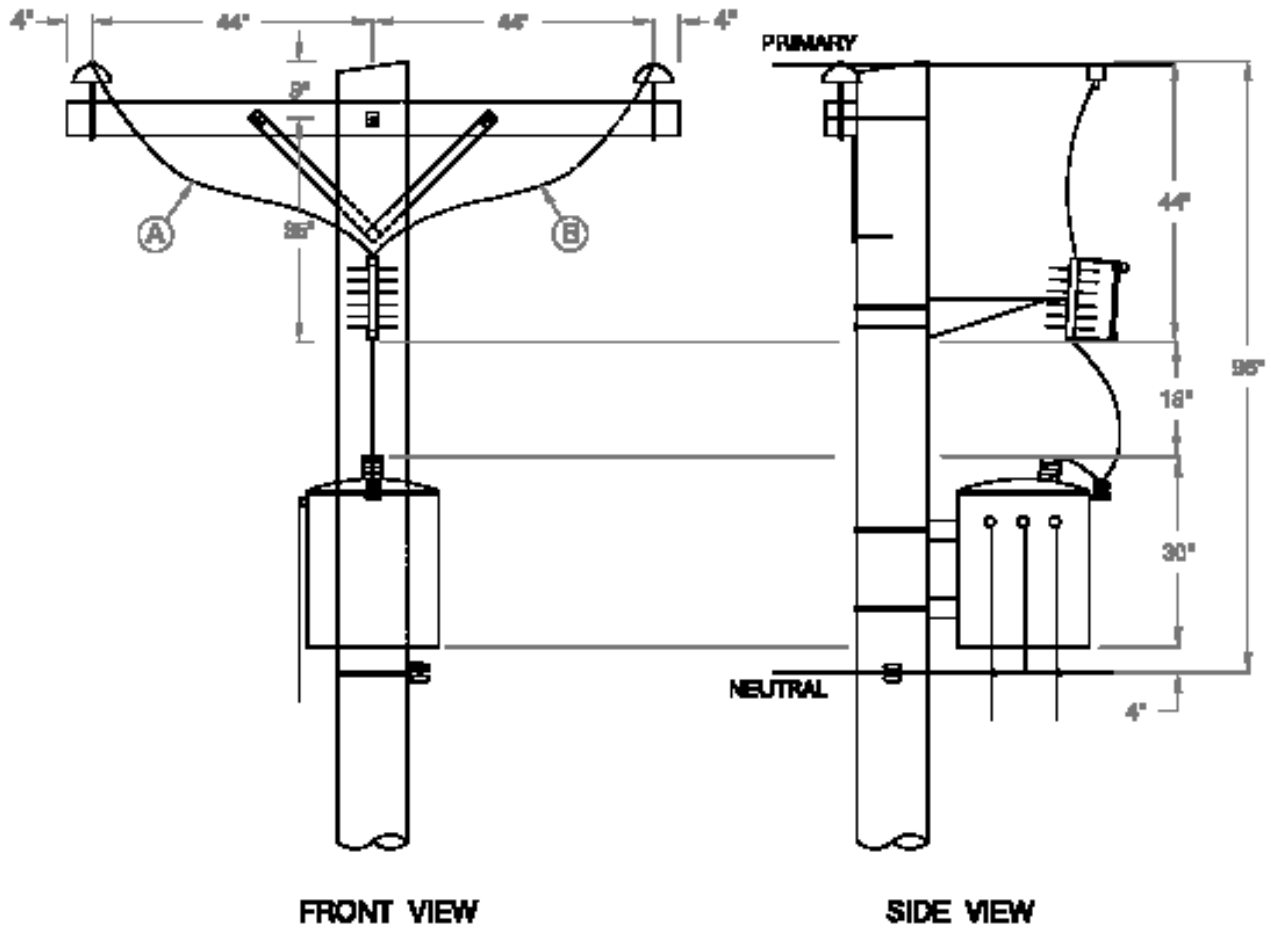
**MEAN TIME: 15 MINUTES**

**DROP DEAD TIME: 20 MINUTES**

This event will consist of moving the transformer jumper from one outside phase to the other outside phase. The load must be removed from the 240/120-volt conventional transformer by opening the fused cutout with an extendo Stick. Once the fuse is open, the competitor must ascend the pole and transfer the high-side jumper from one outside phase to other outside phase. The competitor must then descend the pole and reenergize the transformer with the extendo stick. Line is to be considered energized at 12 kV and APPA approach distances must be maintained.

- Apprentice will be allowed a five (5) minute setup time before starting the event to ask questions and lay out tools.
- **Time starts** at judge's signal.
- The Apprentice must wear rubber gloves ground to ground.
- Leather gloves will be permitted for the extendo portion of the event, unless during inclement weather.
- The competitor must provide his own extendo stick and the stick must be placed on a tarp when not in use.
- An eight-foot shotgun stick will be provided and placed in a grunt bag hanging on the pole.
- Apprentice will maintain proper clearance from bare energized conductors.
- The jumper will be connected with a hot line clamp directly to the stirrup placed on the primary conductor. Stirrups will already be on both sides of the line.
- Competitor must make an adjustment at least once on their fall arrest to be in safe compliance
- **Time stops** once the transformer is re-energized and the extendo stick is fully retracted and the stick is laid on the tarp.

## TRANSFORMER LOAD SWITCHING



### NOTE

JUMPER WILL BE ON PHASE (A) OR (B)

IF PHASE (A), THEN COMPETITOR WILL MOVE JUMPER TO PHASE (B)

IF PHASE (B), THEN COMPETITOR WILL MOVE JUMPER TO PHASE (A)

**APPRENTICE EVENT  
TRANSFORMER LOAD SWITCHING  
JUDGING GUIDELINES**

Name \_\_\_\_\_ City \_\_\_\_\_

**ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC  
10-POINT DEDUCTION.**

**INFRACTIONS THAT CAUSE A 2 POINT DEDUCTION**

Failure to wear rubber gloves ground to ground	-	-	-	_____
Climbing with Safety/Transition strap in hand or dragging free	-			_____
Dropping tools or materials from pole	-	-	-	_____
Misuse of tools or use of the wrong tools	-	-	-	_____
Extended body contact with neutral	-	-	-	_____
Failure to perform hot stick work while belted off below neutral	-			_____
Failure to maintain proper clearance from energized conductors or parts				_____
Cut- Out of pole (Uncontrolled slip-fall arrest catches competitor)				_____
Failure to wear a hard hat properly at all times (not backward)	-			_____
Failure to wear long sleeved shirt; sleeved rolled down and buttoned				_____
Dropping or losing hard hat	-	-	-	_____
Hanging tools or materials on structure, conductor, or safety strap	-			_____
Exceeding mean time of 15 minutes for this event	-	-	-	_____
Not placing Shotgun Stick back in Grunt Bag when finished	-			_____
Improper use of extendo Stick (i.e. Not placing back on Tarp)	-			_____
Failure to make an adjustment on fall arrest				_____
Other _____				_____

**INFRACTIONS THAT CAUSE A 10-POINT DEDUCTION**

Fall from pole resulting in competitor hitting ground				_____
Accidental brush contact with bare phase or neutral	-	-		_____
Arguing with judges/Bad conduct	-	-	-	_____
Failure to wear approved safety glasses with side shields	-	-		_____
Improper energizing and de-energizing sequence	-	-	-	_____
Exceeding drop dead time of 20 minutes	-	-	-	_____
Other - - - - -	-	-	-	_____

**Time: Min:** \_\_\_\_\_ **Sec:** \_\_\_\_\_

**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name:** \_\_\_\_\_

## **JOURNEYMAN EVENT**

### **4KV JUMPER REPLACEMENT**

**MEAN TIME: 15 MINUTES**

**DROP DEAD TIME: 20 MINUTES**

Mean Time: 15 Minutes    Drop Dead Time: 20 Minutes

This event will require the competitor to change out the primary jumper energized on a 4 KV double dead end on an 8 foot fiberglass crossarm. Competitor can change out either side jumper. Constant continuity must be maintained. The primary conductor size will be #2 ACSR. The primary jumper to be replaced will be #6 bare solid copper tied to a polymer insulator with #6 solid copper. The jumper will be connected to the primary with hot line clamps in between tape marks. Competitor will replace jumper, insulator pin and pin type insulator. There will be a jumper made up on the ground for competitor to exchange.

- Journeyman will be allowed a five (5) minute setup time before starting the event to ask questions and lay out tools.
- Fall arrest devices can be installed on poles and lineman can have their tools on.
- **Time starts** at judges' signal.
- The Journeyman shall wear rubber gloves ground to ground.
- Both sides of neutral and clevis must be covered.
- All hot stick work shall be done while belted off below the neutral.
- Continuity must be maintained by using approved insulated mechanical jumpers
- Journeyman will maintain proper clearance from bare energized conductors or covered primary
- All materials and tools must be sent up / down with hand line.
- Competitor must perform all work, not the groundman.
- Competitor must make an adjustment at least once on their fall arrest to be in safe compliance
- **Time stops** after both feet of lineman are on the ground.



**JOURNEYMAN EVENT  
4KV JUMPER REPLACEMENT  
JUDGING GUIDELINES**

Name \_\_\_\_\_ City \_\_\_\_\_

**ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC  
10-POINT DEDUCTION.**

**INFRACTIONS THAT CAUSE A 2 POINT DEDUCTION**

Failure to wear rubber gloves ground to ground	-	-	-	_____
Climbing with Safety/Transition strap in hand or dragging free	-			_____
Dropping tools or materials from pole	-	-	-	_____
Misuse of tools or use of the wrong tools	-	-	-	_____
Extended body contact with neutral	-	-	-	_____
Failure to perform hot stick work while belted off below neutral	-			_____
Failure to maintain proper clearance from energized conductors or parts				_____
Cut- Out of pole (Uncontrolled slip-fall arrest catches competitor)				_____
Failure to wear a hard hat properly at all times (not backward)	-			_____
Failure to wear long sleeved shirt; sleeved rolled down and buttoned				_____
Dropping or losing hard hat	-	-	-	_____
Hanging tools or materials on structure, conductor, or safety strap	-			_____
Exceeding mean time of 15 minutes for this event	-	-	-	_____
Failure to make an adjustment on fall arrest				_____
Other _____				_____

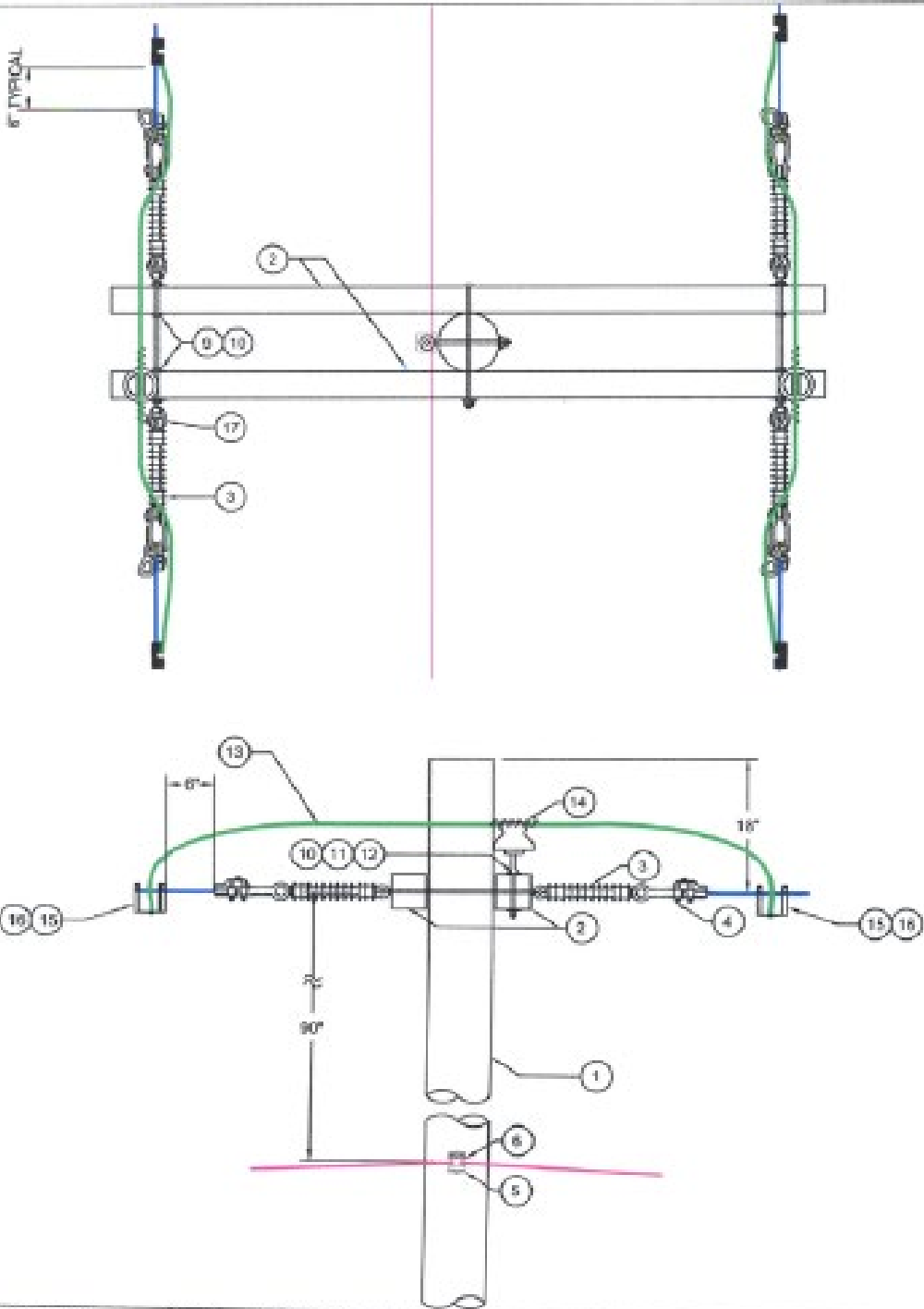
**INFRACTIONS THAT CAUSE A 10-POINT DEDUCTION**

Fall from pole resulting in competitor hitting ground				_____
Accidental brush contact with bare phase or neutral	-			_____
Arguing with judges/Bad conduct	-	-	-	_____
Failure to wear approved safety glasses with side shields	-	-		_____
Improper energizing and de-energizing sequence	-	-	-	_____
Exceeding drop dead time of 20 minutes	-	-	-	_____
Other - - - - -	-	-	-	_____

**Time: Min:** \_\_\_\_\_ **Sec:** \_\_\_\_\_

**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name:** \_\_\_\_\_



#	MATERIAL DESCRIPTION	QTY	VENDOR DESCRIPTION	#	MATERIAL DESCRIPTION	QTY
1	60' POLE	1		10	SQUARE FLAT WASHER	8
2	6" HUBBLESS CROSS ARM	2	ALUMA FORM FT202L-4-90-A	11	15KV POLY INSULATOR	2
3	15KV POLY BELL	4	MPS DS-15M	12	CROSS ARM PIN	2
4	1/2" DEAD END SHOE	4	HUBBELL ASD04051H	13	#4 CU SOLID JUMPER REQUIRED LENGTH	2
5	NEUTRAL CLIPS	1	MACLEAN JOBS	14	#8 CU SOLID TIE WIRE	2
6	POLY NEUTRAL SPOOL	1	PLP (P-63.2)	15	STIRRED	4
7	1/2" NEUTRAL PREFORM TIE	1	PLP (E23P437)	16	1/2" LINE CLAMP	8
8	3/8" DIA BOLTS REQUIRED LENGTH	2		17	3/8" EYE NUTS	4
9	3/8" MACHINE BOLTS REQUIRED LENGTH	3				

3		
2		
1		
0		
REVISED	BY	APPRO.

**JOURNEYMAN JUMPER REPLACEMENT**  
4 KV

**ELECTRICITIES**  
OF NORTH CAROLINA, INC.

SCALE: NTS  
DWG.

*JOURNEYMAN EVENT  
LIGHTNING ARRESTER CHANGE OUT  
MEAN TIME: 15 MINUTES  
DROP DEAD TIME: 20 MINUTES*

This event will consist of changing out two lightning arresters on the outside phases of a two-phase straight-line pole. The arresters will be mounted on a 10-foot cross arm on a 40-foot pole. Line is to be considered energized at 4 kV and APPA approach distances must be maintained.

- Journeyman will be allowed a five (5) minute setup time before starting the event to ask questions and lay out tools.
- Fall arrest devices can be installed on poles and lineman can have their tools on.
- Time starts at judges' signal.
- The Journeyman shall wear rubber gloves ground to ground.
- Both sides of neutral and clevis must be covered.
- All hot stick work shall be done while belted off below the neutral.
- Journeyman will proceed to replace both 4 kV lightning arresters.
- Journeyman will maintain proper clearance from bare energized conductors or covered primary.
- Two lightning arresters will be at each event station for replacement.
- Stinger wire and ground wire (both #4 stranded insulated copper) and wildlife guards will need to be removed from old arrester and installed on new arrester.
- All connections shall be cleaned with wire brushes.
- All materials and tools must be sent up / down with hand line.
- Lightning Arrester will be connected with a hot line clamp directly to the primary conductor in between tape marks.
- All nuts and washers must be reinstalled on the arresters.
- Competitor must perform all work, not the groundman.
- Competitor must make an adjustment at least once on their fall arrest to be in safe compliance
- Time stops after both feet of lineman are on the ground.

**JOURNEYMAN EVENT  
LIGHTNING ARRESTER CHANGE OUT  
JUDGING GUIDELINES**

Name \_\_\_\_\_ City \_\_\_\_\_

**ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC  
10-POINT DEDUCTION.**

**INFRACTIONS THAT CAUSE A 2 POINT DEDUCTION**

- Failure to cover neutral or primary properly - - - \_\_\_\_\_
- Failure to wear rubber gloves ground to ground - - - \_\_\_\_\_
- Climbing with safety/transitioning lanyard in hand or hanging free - \_\_\_\_\_
- Dropping tools or materials from pole - - - - \_\_\_\_\_
- Misuse of tools or use of the wrong tools - - - - \_\_\_\_\_
- Extended body contact with covered neutral- - - - \_\_\_\_\_
- Failure to perform hot stick work while belted-off below neutral - \_\_\_\_\_
- Failure to brush connections - - - - - \_\_\_\_\_
- Failure to maintain proper clearance from energized conductors or parts \_\_\_\_\_
- Cutout and / or failure to maintain control (fall arrest preventing fall) \_\_\_\_\_
- Failure to wear a hard hat properly at all times (not backward) - \_\_\_\_\_
- Failure to wear long sleeved shirt; sleeves rolled down and buttoned - \_\_\_\_\_
- Dropping or losing hard hat- - - - - \_\_\_\_\_
- Hanging tools or materials on structure, conductor, or safety strap - \_\_\_\_\_
- Exceeding mean time of 15 minutes for this event - - - \_\_\_\_\_
- Hand line operation while on competitor's belt - - - \_\_\_\_\_
- Failure to make an adjustment on fall arrest \_\_\_\_\_
- Other \_\_\_\_\_ - \_\_\_\_\_

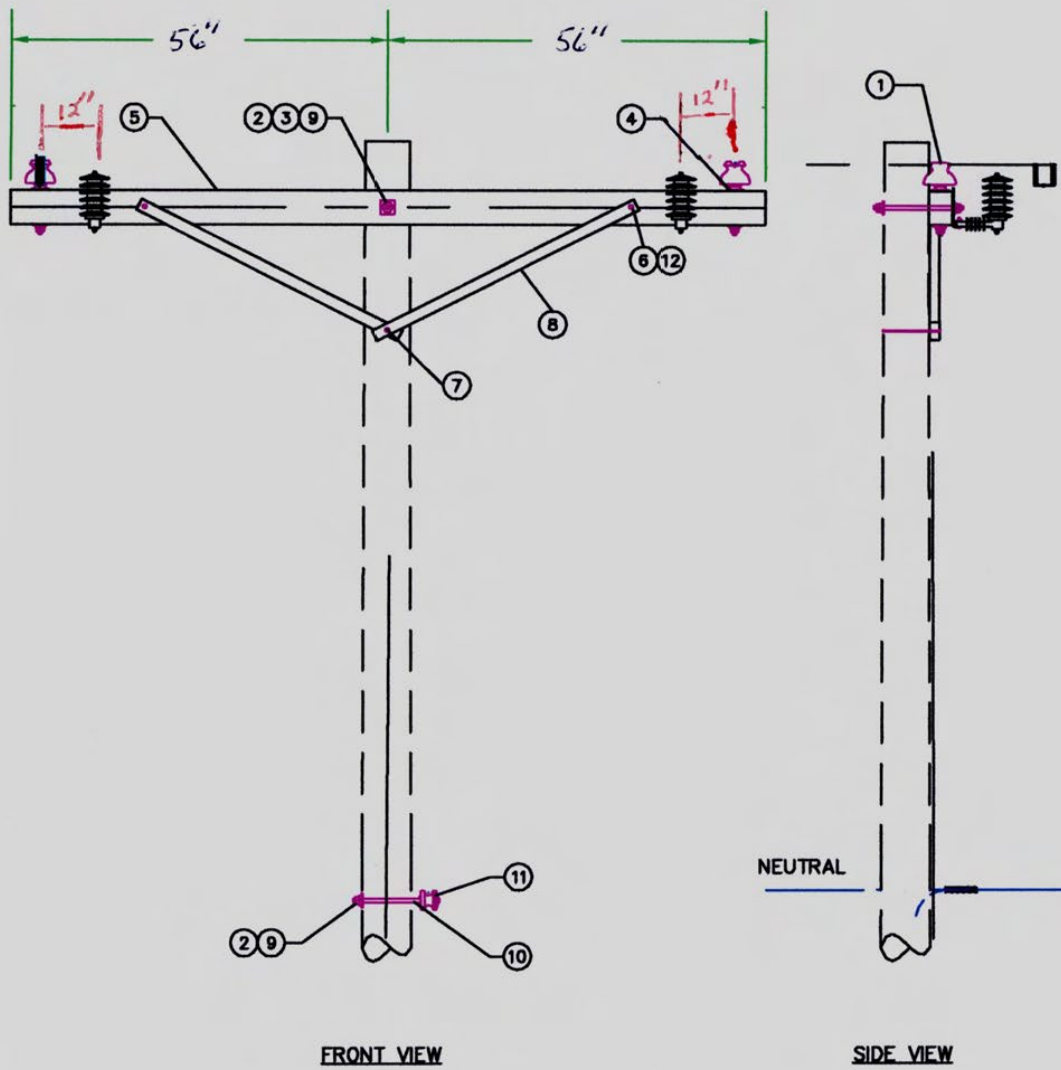
**INFRACTIONS THAT CAUSE A 10-POINT DEDUCTION**

- Fall from pole resulting in competitor hitting ground \_\_\_\_\_
- Accidental brush contact with bare phase or neutral - - - \_\_\_\_\_
- Arguing with judges/Bad conduct - - - - - \_\_\_\_\_
- Failure to wear approved safety glasses with side shields - - - \_\_\_\_\_
- Improper energizing and de-energizing sequence - - - \_\_\_\_\_
- Exceeding drop dead time of 20 minutes - - - - - \_\_\_\_\_
- Other - - - - - - - - - \_\_\_\_\_

**Time: Min:** \_\_\_\_\_ **Sec:** \_\_\_\_\_

**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name:** \_\_\_\_\_



FRONT VIEW

SIDE VIEW

LIST OF MATERIALS		
ITEM	DESCRIPTION	QTY.
1	INSULATOR PIN TYPE	1
2	BOLT MACHINE, 5/8" X REQUIRED LENGTH	1
3	WASHER, 2-1/4" SQUARE WITH 11/16" HOLE	2
4	PIN, CROSSARM, STEEL	1
5	CROSSARM, 3-3/4" X 10'-0"	1
6	BOLT CARRIAGE, 3/8" X 4-1/2"	1
7	SCREW LAG, 1/2" X 4"	1
8	EA, BRACE, WOOD, 38" SPAN	
9	WASHER, LOCK, 5/8"	
10	BRACKET, REGID CLEVIS	
11	INSULATED SPOOL	
12	WASHER, LOCK, 3/8"	

GREENVILLE UTILITIES COMMISSION  
GREENVILLE, NORTH CAROLINA

12.5/7.2KV 3-PHASE TANGENT  
WITH A PDV-100 LIGHTNING ARRESTER



DWN.	RSG	DATE:	9/27/13
CKD.	WJB	APPD.	
SCALE:		NONE	
DATE	REVISION	DATE	REVISION

DWG. NO.  
**REVISED**

CROSSARM CONSTRUCTION TWO-PHASE

**MUTUAL AID EVENT**  
**Egg Climb with a Twist**  
**MEAN TIME: 7 MINUTES**  
**DROP DEAD TIME: 9 MINUTES**

This event will consist of first competitor pulling up a 50 lb weight using a handline until the red tape goes over the sheave of the block. He must then let the weight down in a controlled manner. The weight must hit the ground softly. Then the second competitor climbs a 40 ft. pole with an egg in his mouth and climbs to the top of the pole. Competitor must place the egg in small nut bag (at the end of a 8 ft. cross arm), climb back down pole. Then the third competitor climbs the pole with an egg in his mouth and puts the egg in the small nut bag. The first competitor then uses the provided extendo stick and brings the small nut bag to the ground retracting stick fully. He must then place the eggs in provided container then replace nut bag back to arm with extendo stick and fully retract stick and place it on the tarp.

1. Competitors will be allowed a 5 minute setup time before starting the event and to ask questions.
2. Time starts at the Judges' signal.
3. Leather Gloves must be worn the entire event.
4. Fall arrest may be installed on pole during set up.
5. Climbers must be removed when lineman returns to the ground and gaff guards reinstalled.
6. Time stops when extendo stick is fully retracted and laying on tarp.
7. Competitors must make an adjustment at least once on their fall arrest to be in safe compliance

**MUTUAL AID EVENT**  
**Egg Climb with a Twist**  
**JUDGING GUIDELINES**

Name \_\_\_\_\_ City \_\_\_\_\_

**ANY VIOLATION OF STANDARD SAFETY RULES IS AN AUTOMATIC  
10-POINT DEDUCTION.**

**INFRACTIONS THAT CAUSE A 2-POINT DEDUCTION**

Dropping of Nut Bag	_____
Dropping or losing hard hat	_____
Failure to wear a hard hat properly at all times (not backward)	_____
Failure to wear long sleeved shirt; sleeves rolled down and buttoned	_____
Exceeding mean time of 7 minutes for this event	_____
Misuse or throwing Extendo Stick	_____
Lowering weight in an uncontrolled manner	_____
Allowing weight to hit the ground hard (dropping weight)	_____
Cut- Out of pole (Uncontrolled slip-fall arrest catches competitor)	_____
Failure to make an adjustment on their fall arrest	_____
Cracked or broken egg	_____
Other _____	_____

**INFRACTIONS THAT CAUSE A 10-POINT DEDUCTION**

Fall from pole resulting in competitor hitting ground	_____
Failure to wear leather gloves at all times	_____
Arguing with judges/Bad conduct	_____
Failure to wear approved safety glasses with side shields	_____
Exceeding drop dead time of 9 minutes	_____
Dispute with Chief Judge that is not overturned	_____
Other _____	_____

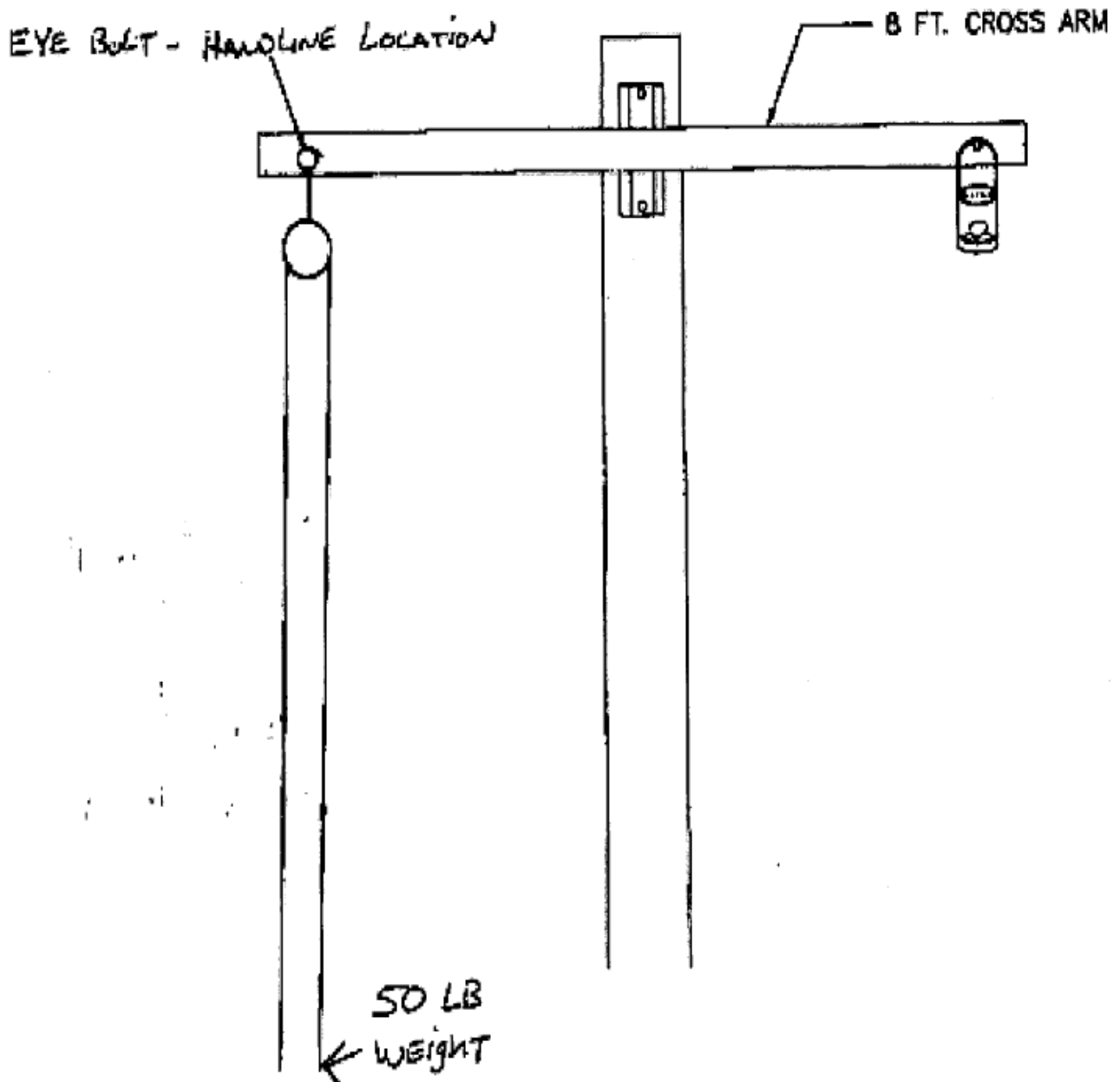
**\*After 20 minutes competitor's time will be disqualified and no time will be allowed for this event.**

**Time: Min: \_\_\_\_\_ Sec: \_\_\_\_\_**

**Score: 100 - \_\_\_\_\_ (total deductions) = \_\_\_\_\_ (Total Event Score)**

**Judge's Name: \_\_\_\_\_**

EGG CLIMB WITH A TWIST  
40 FT. POLE  
8 FT. CROSS ARM





**COMPETITOR ENTRY FORM  
NCAMES ANNUAL LINEMAN'S RODEO**

**CIRCLE ONE OF THE FOLLOWING FOR EACH QUESTION (Answer all 3):**

1. COMPETITION LEVEL:            *JOURNEYMAN*                      *APPRENTICE*
2. COMPETING IN MUTUAL AID TEAM EVENT:                      *YES*                      *NO*
3. SWEAT SHIRT SIZE:            *M*            *L*            *XL*            *XXL*            *XXXL*

COMPETITOR'S NAME: \_\_\_\_\_  
UTILITY/CITY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY/STATE/ZIP CODE: \_\_\_\_\_  
PHONE #: \_\_\_\_\_  
E-MAIL: \_\_\_\_\_

I confirm that the hooks, belts, and hand tools that I provide for the rodeo will be in safe operating condition.

***Signature of Competitor:*** \_\_\_\_\_

---

**THE FOLLOWING MUST BE COMPLETED BY APPRENTICE'S SUPERVISOR:**

I, \_\_\_\_\_ (supervisor), certify that the above listed contestant meets the criteria for apprentice.

The Apprentice's supervisor shall complete the information below:

***Signature of Supervisor:*** \_\_\_\_\_  
TITLE: \_\_\_\_\_  
UTILITY/CITY: \_\_\_\_\_  
PHONE #: \_\_\_\_\_  
E-MAIL: \_\_\_\_\_

-----  
**\*\*Note: Release form must also be signed. See next page. \*\***

**\*Send to:** Darryl Strother  
City of Rocky Mount.  
331 S. Franklin street                      P.O. Box 2951                      Rocky Mount, NC 27802-1180

**RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK, AND INDEMNITY  
AGREEMENT**

In consideration of NCAMES staging a Lineman’s Rodeo at Concord, NC (hereinafter “the Event”), or otherwise permitting me to attend such Event, I, on my own behalf and on behalf of my heirs, next of kin, representatives, administrators, and assigns, hereby agree as follows:

1. I HEREBY AGREE TO RELEASE, WAIVE, DISCHARGE AND COVENANT NOT TO SUE NCAMES, its officers, directors, managers, employees, shareholders, insurers, or any participant in the Event (hereinafter “Releases”) FOR ANY AND ALL LIABILITY, INCLUDING BUT NOT LIMITED TO, PERSONAL INJURY, LOSS OR DAMAGE TO PROPERTY caused or alleged to be caused in whole or in part by the negligence or gross negligence of the Releases’ or otherwise while I am participating in or attending the Event. I expressly acknowledge that injuries received may be compounded or increased by the negligent rescue operations or procedures of the Releases’ and this Release and Waiver of Liability, Assumption of Risk, and Indemnity Agreement (the “Release”) is expressly intended to include any such compounding or increasing of injury.
  
2. I understand that engaging in Lineman’s Rodeo activities constitutes my involvement in a dangerous activity with accompanying risk of personal injury or death, or loss or damage to personal property, and I hereby voluntarily assume all risks and accept personal responsibility for the damages and medical expenses following any injury, permanent disability, or death, or loss or damage to personal property caused by the negligence or gross negligence of the Releases’.
  
3. I hereby agree to indemnify and hold harmless the Releases’ and each of them from any loss, liability, damage or cost they may incur due to my presence or participation in the event, including but not limited to responding to or defending against any allegation, claim or cause of action brought in violation of this Release.

I HAVE READ THIS RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK, AND INDEMNITY AGREEMENT, FULLY UNDERSTAND ITS TERMS, UNDERSTAND THAT I HAVE GIVEN UP SUBSTANTIAL RIGHTS BY SIGNING THE AGREEMENT FREELY AND VOLUNTARILY WITHOUT INDUCEMENT, ASSURANCES, OR GUARANTEES BEING MADE TO ME AND INTEND MY SIGNATURE TO BE A COMPLETE AND UNCONDITIONAL RELEASE OF ALL LIABILITY TO THE GREATEST EXTENT ALLOWED BY LAW.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Witness: \_\_\_\_\_ Date: \_\_\_\_\_

## Check list

Completed the competitor form

T shirt size

Competitor Name and City/Town representing

Supervisor agrees and signs Apprentice four years or less doing linework

Waiver form

Signed by competitor and supervisor

Conference registration form – **Due to Gail Boggs by April 1, 2024.**

Name of conference attendee

Payment included per attendee.

Signed by supervisor \_\_\_\_\_ Date \_\_\_\_\_