

## AGRICULTURAL MECHANICS CAREER DEVELOPMENT EVENT Rules for the State FFA Event

### **Sponsor**

This event is sponsored by Progress Energy Company, and Duke Power. This event is also made possible through in-kind contributions from the Department of Biological and Agricultural Engineering at North Carolina State University.

### **State Event Superintendent**

The Superintendent for this event is Mr. Horace Johnson, Central Region Agricultural Education Coordinator, 126 Alexander Drive, Suite 300, PO Box 1089, Lillington, NC 27546. Phone: 910-814-6048 Fax: 919.515.9060 Email: [horace\\_johnson@ncsu.edu](mailto:horace_johnson@ncsu.edu)

### **Eligibility and General Guidelines**

This event is open to all FFA chapters and FFA members in good standing. Members winning a previous state event in this area or that have participated in a previous national event in this area are ineligible.

Teams may consist of three or four individuals. The fourth lowest team member score is not considered except in the case of a tie. No alternates are allowed in state events. Any alternate found participating in a state event will result in team disqualification. FFA members and advisors may not visit the site of a state career development event within seven days of the start of the event. Teams that violate this rule will be disqualified.

FFA members in good standing may also participate as individuals in this event. A chapter advancing through the regional event may have up to two members participate as individuals as long as the chapter does not have a team participating in the event. Their scores will only count toward individual recognition, and will not be tallied as a team score. Three members participating in this event from the same chapter constitute a team.

The top three individuals in the federation event are eligible to participate in the regional event as individuals regardless of their team placing. The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing.

The use of cellular phones, Personal Digital Assistants (PDA's) or any other mobile electronic communication device is prohibited during any state-level career development event. Any violation of this rule by any team member will result in total team disqualification.

Any member found cheating in any state-level career development event will result in total team disqualification for that event.

At the North Carolina FFA State Convention, members may participate in only one career development event with the exceptions of Creed and Parliamentary Procedure or Prepared Public Speaking and Parliamentary Procedure.

### **State Career Development Event Participation**

The appropriate numbers of teams based on event participation from each region are eligible to compete in the state career development event. The top three individuals in the regional event are eligible to participate in the state event as individuals regardless of their team placing. Teams and individuals advancing to state event participation must be certified by the regional FFA advisor.

### **Procedures for Administering the Event**

1. Personal safety equipment in the form of safety glasses, hearing protectors, welding helmets, welding gloves and welding aprons are to be provided by each participant.
2. The instructional areas for 2006 – 2010 are:
  - Machinery and Equipment Systems
  - Industry and Marketing Systems
  - Energy Systems
  - Structural Systems
  - Environmental-Natural Resource Systems
3. The event is divided into three basic phases. These are:
  - Written Examination: Each participant will complete a fifty question, four-item multiple choice examination. Ten questions from each of the five instructional areas will be used. Participants are allowed a maximum of forty minutes to complete this examination.
  - Problem Solving: Each participant will complete twenty problem-solving activities, four in each of the five instructional areas. A problem solving activity is defined as a mental activity involving the gathering or searching of information, studying the data or information and the use of a logical solution process based on commonly accepted standards to solve a problem related to a subject matter unit. An example might be to look up specific data from an operator's manual to solve a problem stated in written form. These activities will be set up on a four-item multiple choice basis with two minutes allocated to complete each. Each participant will have a maximum of forty minutes in which to complete the problem solving activities.
  - Performance Skills: Each participant will complete one hands-on performance activity in three of the five instructional areas. Each participant will have a maximum of 45 minutes for the performance skill phase or 15 minutes for each skill. Performance skills in the state event will be chosen from skills that are performed in the agricultural engineering curriculum.

4. [All consumable supplies will be provided for each participant's use. Equipment will be in good working order and of sufficient quantities to allow the event to proceed smoothly.](#)
5. Each participant will be scored based on the following:
  - Written Examination: Fifty questions at one point per correct answer = 50 points.
  - Problem Solving: Twenty Activities at three points per correct answer = 60 points.
  - Performance Skills: Three Activities with a value of twenty-five points each = 75 points.

The maximum score possible per participant is 185 points.

### **Procedure for Determining the State Event Winner when Scores are tied**

In the event a tie score exists, apply the following methods in sequential order until the tie is broken:

1. Compare the alternate scores. The lowest team member score is the alternate score.
2. Compare the total team scores for the problem solving component and the higher scoring team is the winner.
3. If these methods fail to break the tie, co-winners will be declared and a run-off event will be held to determine which team will represent North Carolina at the National FFA Convention. The run-off event will follow the same rules as the state event.

Special Note: In the event a tie exists between first, second or third place teams on the regional level, the tied teams will be allowed to participate in the state event.

### **Dress Code**

Participants are required to follow the North Carolina FFA Career Development Event Dress Code. A ten percent reduction in the total team score will be taken if a participant violates the dress code.

For this event, all participants should wear appropriate shop clothing and provide their own industrial-quality eye protection.

### **State Awards**

The following awards will be presented annually at the state FFA convention provided sponsorship is available:

State Winning Team	\$500, first place team plaque, pins for team members
Second Place Team	Second place team plaque, pins for team members
Third Place Team	Third place team plaque, pins for team members
High Scoring Individual	Plaque

## **National Career Development Event Participation**

State winning teams advancing to national career development event participation will be automatically registered for the national event. It is the responsibility of the Chapter FFA Advisor to complete all necessary national certification and waiver forms and return them to the State FFA Coordinator by the assigned due date.

State winning CDE Teams that choose not to participate at the national level should contact the state office by Sept 1 prior to national convention. Teams that fail to inform the state office prior to Sept 1 will be ineligible to participate in that same CDE for the next year (chapters may appeal to the State FFA Board of Directors). Teams that do not compete at the National Convention will be required to pay back the \$500 travel award.

## **Bibliography**

Selected references are:

Cooper, Elmer., Herren, Ray., Agricultural Mechanics Fundamentals and Applications. latest ed. Albany: Delmar, 2002.

Cooper, Elmer., Herren, Ray., Agricultural Mechanics Fundamentals and Applications: Instructors Guide. latest ed. Albany: Delmar, 2002.

Roth, Alfred., Small Gas Engines. Tinley Park: The Goodheart-Wilcox Company.Inc.,2000.

Roth, Alfred., Workbook, Small Gas Engines. Tinley Park: The Goodheart-Wilcox Company.Inc.,2000.

Roth, Alfred., Instructor's Manual, Small Gas Engines. Tinley Park: The Goodheart-Wilcox Company.Inc.,2000.

\* Also see the National FFA Career Development Events Handbook for more information.

## **Supplemental Information**

The scorecard on the following page is a sample of the type that may be used in evaluating the performance skills phase of the event.

# Performance Skill - Cutting with the Oxyacetylene Torch

Member Name \_\_\_\_\_ Chapter \_\_\_\_\_

Contestant Number \_\_\_\_\_

Using the oxyacetylene cutting torch, cut two pieces of metal of equal size not to exceed four inches in length.

<b>Performance Skill</b>	<b>Points Allowed</b>	<b>Points Earned</b>
Adjust and monitor regulators, pressures gauges, and tank gauges.	5	_____
Igniting the torch	3	_____
Cutting the metal	8	_____
Equipment shutdown procedure	4	_____
Using approved safety practices	5	_____
Total	25	_____