**SkillsUSA-NC Heavy Equipment Operation Contest**

**PURPOSE:**

To evaluate each competitor’s preparation for employment and to recognize outstanding students for excellence and professionalism in the field of heavy equipment operation.

**ELIGIBILITY:**

Contestants must hold a valid Driver’s License (NOT permit)

**CLOTHING – Blue Attire**

Light blue work shirt

Navy pants

Black, brown or tan work safety shoes (with protective toe cap that cover the ankles)

**EQUIPMENT AND MATERIALS**

1. Supplied by the technical committee:

* All necessary tools and equipment for the contest
* Hard hats and safety vests

2. Supplied by Contestant:

* Safety Glasses (prescription safety glasses must have shield)
* Steel toed boots
* Resume

**COMPETITION GUIDELINES**

1. Competitors may be assigned problems or projects requiring 10-30 minutes time to complete 2. The following general safety rules will be followed:

a. Seat belt must be worn at all times during operation of equipment.

b. No loose clothing is permitted.

c. Long hair must be tied behind the head or netted.

d. Gloves must not be worn during operation of machinery unless otherwise specified in competition station requirements.

e. Any liquid or grease spilled must be cleaned up immediately and reported to the judge.

f. All injuries, no matter how slight, must be reported immediately to the judge.

3. Competitors will be judged on safety and operation performance. Points will be assigned by the technical committee based on the difficulty of the assigned task.

4. Competitors must have received instruction in heavy equipment operation and has demonstrated knowledge of the safe operation, basic machine and maintenance components, and safe usage of the following equipment and machines that may be used in the competition:

* Excavators
* Wheel Loaders
* Skid Steers
* Bulldozers

**STANDARDS & COMPETENCIES (for North Carolina):**

**HEO 1.0** — Demonstrate competencies related to safety

1.1. Demonstrate knowledge of OSHA, MSHA, NIOSH requirements

1.2. Present understanding of personal protection and basic principles of safety

1.3. Understand and practice safe equipment operation and maintenance

 **HEO 2.0** — Demonstrate competencies related to machine component identification

2.1 Identifies and describes the common uses, types, components, instruments, parts, controls and attachments on all machines listed in this document

2.2. Demonstrates comprehension of prestart inspection procedures

2.3. Demonstrates comprehension of preventative maintenance requirements

2.4. Demonstrates use of hand signals

**HEO 3.0** — Demonstrate competencies related to mini excavators

4.1. Identifies and describes the common types, uses, and components and parts of excavators

4.2. Demonstrates comprehension of safety guidelines, prestart inspection procedures, and preventive maintenance requirements

4.3. Performs startup and operation and demonstrates work activities and maneuvers associated with an excavator

4.4. Uses Excavator to complete assigned task

**HEO 4.0** — Demonstrate competencies related to wheel loaders

4.1. Identifies and describes the common types, uses and components and parts of wheel/track loaders

4.2. Demonstrates comprehension of safety guidelines, prestart inspection procedures, and preventive maintenance requirements

4.3. Performs startup and operation and demonstrates work activities and maneuvers associated with a wheel/track loader

4.4. Uses wheel/track loader to complete assigned task

**HEO 5.0** — Demonstrate competencies related to bulldozers

7.1. Identifies and describes the common types, uses, and components and parts of bulldozers 7.2. Demonstrates comprehension of safety guidelines, prestart inspection procedures and preventive maintenance requirements

7.3. Performs startup and operation, and demonstrates work activities and maneuvers associated with bulldozers

7.4. Uses dozer to complete assigned task

**HEO 6.0** — Demonstrate competencies related to skid steers

6.1. Identifies and describes the common types, uses, and components and parts of skid steers 6.2. Demonstrates comprehension of safety guidelines, prestart inspection procedures and preventive maintenance requirements

6.3. Performs startup and operation, and demonstrates work activities and maneuvers associated with skid steers

6.4. Uses skid steers to complete assigned task