ENGINEERING - WELDING DAY
Agricultural Engineering Building, OSU Campus – Friday, July 27
TBA, Assistant Superintendent

Location: The Agricultural Engineering Building at The Ohio State University is located at 590 Woody Hayes Drive. It is just east of the Agriculture Administration Building. Parking for the contest will be in the lot between the two buildings**. Directions**: Exit Rt. 315 at Lane Avenue, go east to the first stop light (Fyffe Road), turn right, then turn left just before reaching Woody Hayes Drive. Follow signs to the welding contest.

GENERAL GUIDELINES

1. Age of Participants:
   - 4-H Age unless noted in specific class guidelines

2. Participation Guidelines:
   - Counties may be represented by a maximum of one participant in each class.
   - Winner of any class in 2011 is not eligible to participate in the same class in 2012.
   - Any previous members of the National Engineering Team are not eligible to compete in the same class again.
   - All welding on projects exhibited must be done using Shielded Metal Arc Welding (SMAW), commonly referred to as stick welding.
   - Projects will be on display to the public following judging until after the awards presentation at **approximately 5:00 p.m**. unless space is unavailable. The project must remain on display to be considered for awards.

3. Type of Evaluation:
   - Participants will have a personal interview evaluation with a judge.
   - Judge will evaluate participant on the following basis (also see sample score sheet):

10%	Completed Project Book	10%	Personal Safety
20%	Welding Project from Project Book	20%	On-site Weldment
20%	Welding Project Optional Design	20%	On-site Interview

4. Participant to bring:
   - Registration information provided to you by your County 4-H Educator.
   - Completed project book showing involvement in and progress toward completion of their project goals.
   - Participants are responsible for supplying and monitoring any equipment and/or supplies needed to aid in the completion of their project.
   - Participants must bring and wear industrial quality eye protection, long sleeve shirts, long pants, and high-top foot protection (no athletic foot wear).

5. For additional details and updates related to 4-H Engineering activities, go to their web site: www.4hengineering.osu.edu.

Classes

J-1 Welding

Every participant shall bring and exhibit two welding projects: one will be one of the recommended projects in the 4-H Project Book (Arcs and Sparks) and the other will be one of an optional design which is no larger than that which can be wheeled into or around the building on a hand dolly by the welding contest participant. The welding project would have to fit in an imaginary box 6 ft. x 6 ft. x 3 ft.

All welding contest participants will demonstrate their SMAW ability by making the following welds: a 3" groove weld and a 3" fillet weld. Welding will be done using a Shielded Metal Arc Welding Power Source and 1/8" diameter, AWS type E-6011 electrodes. The power sources, base metal and electrode will be provided.

Each welding contest participant will be suitably attired for SMAW, by wearing industrial quality eye protection, long sleeve shirts, long pants and high top foot protection (no athletic foot wear). Gauntlet leather welding gloves and welding helmets with a flip front (#10 filter) plate will be provided but any

welding contest participant may bring and use their own. Contestants wearing shorts, short sleeved shirts or any inappropriate clothing or footwear will not be permitted to weld. Industrial quality eye protection (clear or shaded) will be worn in the contest area where the weldment is being created and especially under the welding helmet during welding.

J-2 Welding (Bigger Weldment)
In this class, participants will follow and meet all requirements and criteria listed for J-1, except for size of the Weldment. For class J-2 the size is unlimited, but is preferred to be no larger than 8 ft x 8 ft and 20 ft. **For a Weldment exceeding any of those dimensions, we ask you to call the Superintendent at 614-292-6648, at least a week in advance of the contest.**

AWARDS AND SPONSORS

1. All participants will receive a participation award sponsored by the Ohio State Fair.
2. The top 20% of each class will receive "Outstanding of the Day" awards sponsored by the Ohio State Fair.
3. The top individual from classes J-1 and J-2 will receive a clock trophy; the 2011 sponsor was **The American Welding Society-Columbus Section.**
4. In each class, the best individual from each of five age divisions (9-10, 11-12, 13-14, 15-16, &17-18) will be recognized. Each will receive an AC Welder. The overall winners will receive an AC/DC welder. All together, the **Lincoln Electric Company** will donate 12 welders.
5. One individual from each class, age 14 or older, will be selected to represent Ohio in the Welding contest at the National 4-H Engineering, Science, & Leadership Event in September at Purdue University.

2011 CLASS WINNERS

J-1 Kris Funic, Perry
J-2 Matthew Klopfenstein, Paulding

Previous participants in the National 4-H Engineering, Science, & Leadership Event are not eligible to participate again in the same project area.