

2011/2012 DISTRICT – 10 SKILLS U.S.A. COMPETITION FORMAT.
(INDUSTRIAL ELECTRIC)
FRIDAY JANUARY 20, 2012

TIME -----9:30 – 3:00
(REGISTRATION AT 9:30 / PROMPTLY
FOLLOWED BY COMPETITION)

LOCATION -----ELECTRICAL OCCUPATIONS CLASSROOM

- A. GENERAL RULES.
 - 1. ALL WORK SHALL BE NEAT AND PROFESSIONAL.
 - 2. ALL WORK SHALL CONFORM TO THE 2011 NATIONAL ELECTRICAL CODE.
 - 3. THE CONTESTANT WILL PROCEED THROUGH THE REQUIRED TASKS IN ANY ORDER, UPON COMPLETION OF ANY TASK PLEASE NOTIFY THE CONTEST JUDGES, BEFORE PROCEEDING TO THE NEXT TASK.
- B. EQUIPMENT SUPPLIED.
 - 1. ALL NECESSARY MATERIALS/EQUIPMENT/COMPONENTS NEEDED TO COMPLETE EACH TASK WILL BE SUPPLIED BY C.C.C.& T. C.
- C. CONTESTANT MUST PROVIDE.
 - 1. ALL NECESSARY ELECTRICAL HAND TOOLS.
 - 2. SAFETY GLASSES.
 - 3. HARD TOED SHOES (WORK BOOTS).
 - 4. VOLT-OHM METER OR EQUIVALENT.
 - 5. CONDUIT BENDER (1/2" E.M.T.)
- D. CONTEST COULD CONSIST OF THE FOLLOWING TASKS.
 - 1. WIRE A THREE-PHASE MOTOR STARTER, WITH THE POSSIBILITY OF THE FOLLOWING TASKS.
 - A. WIRE A MOTOR STARTER WITH VARIOUS PUSH BUTTON CONTROLS.
 - B. WIRE AN INDUSTRIAL TIMER, TIED INTO A MOTOR STARTER CIRCUIT.
 - C. WIRE A REVERSING STARTER WITH VARIOUS PUSH BUTTON CONTROLS.
 - D. WIRE A MOTOR STARTER WITH A JOG.
 - E. WIRE A BANK OF MOTOR STARTERS WITH VARIOUS CONTROL RELAYS OR LIMIT SWITCHES.

- F. DRAW A LADDER DIAGRAM OF THE COMPLETED TASK.
- G. BENT ½-INCH E.M.T. CONDUIT , AS INDICATED.
- H. DETERMINE TRANSFORMER HOOKUPS/TAPS AND CORRECT FUSING.
- I. COLOR CODE WIRE VOLTAGES AS INDICATED.
- J. DEMONSTRATE/EXPLAIN OPERATION OF TASK TO JUDGES.

NOTE!! ALL MOTOR STARTERS USED IN THE REQUIRED TASKS WILL BE SQUARE "D" BRAND, ANY RELAY COMPONENTS WILL BE SQUARE D OR ALLEN BRADLEY.

IF YOU HAVE ANY QUESTIONS PLEASE FEEL FREE TO CONTACT ME AT CRAWFORD COUNTY CAREER & TECHNICAL CENTER.
1-814-724-6024 EXTENSION 216

RODERICK J. FRAZIER



ELECTRICAL OCCUPATIONS INSTRUCTOR C.C.C. & T. CENTER