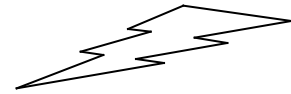


# ELECTRONIC SYSTEM



## OVERVIEW

TSA participants in the Electronic Systems event are required to design and build a product to solve an identified problem. The product is evaluated on complexity, ingenuity, quality of the schematic, and the written description of the product.

The Electronic Systems problem for the 2001 and 2002 is to design and build an electronic security device for a computer that authorizes its use to one person or to specific individuals. This can be done by voice recognition, thumbprint, etc. It can be developed as an internal or external component of the computer, however, for judging purposes the device must be able to be viewed from outside the computer case. The evaluator may request a demonstration of the device with a new user during the finalist interview.

## PURPOSE

The Electronic Systems event provides the opportunity for TSA members to demonstrate their ability to design, develop, and build an electronic product.

## ELIGIBILITY

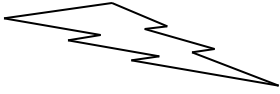
Entries are limited to one (1) individual per chapter.

## TIME LIMITS

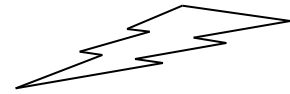
- A. Devices, drawings, parts list, and description are set up in the event registration area during the time specified for event set-up.
- B. Interviews with participant finalists are limited to ten (10) minutes.

## PROCEDURE

- A. Participants check in and set up their entries at the time and place stated in the conference program.
- B. Event evaluators rate each entry using the official rating form. The participants with the top five (5) scores in each of the two (2) heats become finalists for the demonstration interviews. A finalist list is posted.
- C. Finalists report to the site of their entry at the time designated by the event coordinator.
- D. Finalists demonstrate and are interviewed by the evaluators.
- E. After rating the demonstrated devices and conducting individual interviews, the event evaluators and the event coordinator break any ties and identify the rankings of the ten (10) finalists.
- F. Entries are picked up at the assigned pick-up time.
- G. The ten (10) finalists are announced at the awards ceremony.

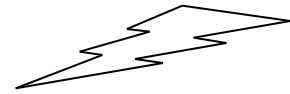
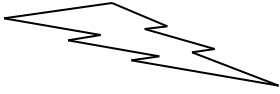


# ELECTRONIC SYSTEM



## REGULATIONS

- A. Entries must be constructed and/or assembled by the student.
- B. Each entry is allotted an area 3' wide by 3' tall by 2' deep and must be displayed and demonstrated within that area.
- C. Commercially prepared kits are not acceptable entries in this event.
- D. All drawings, parts lists, and descriptions are presented in a portfolio (a standard 1" three-ring binder).
- E. A schematic drawing and parts list must be in the portfolio.
- F. The entry must include a one-page written description of its application.
- G. Only finalists describe the project and demonstrate its use during the scheduled demonstration/interview.
- H. The entry must have been built within the past school year.
- I. Any special set-up and/or equipment, including extension cords, required for project entry is the responsibility of the participant.
- J. The entry must be an individual project.



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## ELECTRONIC SYSTEMS EVENT COORDINATOR INSTRUCTIONS

### PERSONNEL

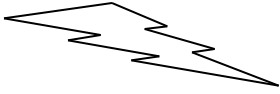
- A. Event coordinator
- B. Event evaluators, six (6)
- C. Assistants to check-in and receive entries, two (2)
- D. Person assigned for security

### MATERIALS

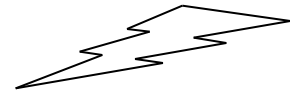
- A. Coordinator's box, containing:
  - 1. Event guidelines, one (1) copy each for coordinator and evaluators
  - 2. Official rating forms
  - 3. List of entries, with finalist report
  - 4. List of event evaluators/assistants
  - 5. ID tags or stick-on tabs to number entries
  - 6. Marking pens for event evaluators
  - 7. Finalist list for posting
  - 8. Results envelope
- B. Display tables for electronic systems products
- C. Access to 110V AC outlets

### PROCEDURE

- A. Upon arrival at the conference, report to the CRC room and check the contents of the coordinator's box. Review the event guidelines and check to see that enough evaluators/assistants have been scheduled.
- B. Inspect the area(s) in which the event is being held for appropriate set-up, including room size, chairs, tables, outlets, etc. Notify the event manager of any potential problems.
- C. Check in the entries at the time stated in the conference program. Anyone reporting who is not on the entry list may check in only after official notification is received from the CRC chairman. Entries turned in late are NOT considered unless the lateness has been caused by the oversight or negligence of the conference coordinators. Secure the entries in the designated area.
- D. One (1) hour before the event is scheduled to begin, meet with your evaluators/assistants to review time limits, procedures, regulations and all other details related to the event. If questions arise that cannot be answered, speak to the event manager before the event begins.
- E. Have the event evaluators evaluate the entries as submitted without consulting each other.



# ELECTRONIC SYSTEM



- F. Any deviation from the official event guidelines is a rules violation and results in a twenty-point penalty or disqualification.
- G. Have the event evaluators tally and turn in the rating forms to the event coordinator
- H. Prepare a list of the ten (10) finalists and submit it to the CRC chairman for posting.
- I. Conduct interviews with the ten (10) finalists. (Be sure the time allowed and the questions used are similar for each interview.)
- J. Complete the finalists report, including evaluators' signatures. Evaluators discuss and break any ties that affect the top three (3) placements.
- K. Submit the finalists report, including a ranking of the ten (10) finalists, and all related forms in the results envelope to the CRC room.
- L. If necessary, manage security and the removal of materials from the area.



# ELECTRONIC SYSTEM



## ELECTRONIC SYSTEMS

2001-2002 OFFICIAL RATING FORM

Junior

HIGH SCHOOL

ENTRANT'S ID #																			
<b>EVALUATIVE CRITERIA</b>																			
Complexity of entry ..... 20 pts.																			
Ingenuity ..... 10 pts.																			
Quality of work. .... 20 pts.																			
Schematic drawing ..... 10 pts.																			
Parts list ..... 10 pts.																			
Written description of application and use ..... 10 pts.																			
Rules violation (if any) .. . minus 20 pts.																			
<b>SUBTOTAL</b> ..... 80 pts.																			
Interview (finalists only) ..... 20 pts.																			
<b>TOTAL</b> ..... 100 pts.																			
Evaluator's comments/notes:																			
I certify these results to be true and accurate to the best of my knowledge.																			
Evaluator's signature _____																			