OFF THE GRID

OVERVIEW
Throughout the world, people are working to become more self-sustaining when it comes to landscaping and architectural design. Sometimes the purpose is to live off the grid, and other times it is to create a smaller carbon footprint. There are many options throughout the world, but sometimes a location limits or enables those options. In this event, participants conduct research on a sustainable architectural design for a home in a country of the team's choosing (other than their home country). Teams will create a display and a model. The model can be of the home the team designed or of a specific aspect of their design. Semifinalist teams will give a presentation and are interviewed about their design. The design brief for this competition will be posted on the TSA website under Competitions/Themes and Problems.

ELIGIBILITY
• Preliminary Round: Three (3) teams per state may participate
• Semifinal Round: A minimum of two (2) and a maximum of three (3) team members participate in the presentation/interview.

TIME LIMITS
The semifinal presentation/interview will be no longer than ten (10) minutes.

LEAP
A team LEAP Response is required for this event and must be submitted at event check-in (see LEAP Program).

ATTIRE
TSA competition attire is required.

PROCEDURE
Preliminary Round
1. Team members select a country and design a sustainable home based on that country's climate conditions, raw materials available, construction methods, and infrastructure.
2. Team members research their chosen country using resources, such as books, interviews, websites, magazines, professional journals, etc.
3. Participants prepare their documentation and display according to the regulations in this guide.
4. Participants check in their entry and LEAP Response at the time and place stated in the conference program. No more than two (2) team members setup the display.
5. Entries are evaluated by judges. Neither students nor advisors are present at this time.
6. A list of twelve (12) semifinalists (in random order) will be posted.

Semifinal Round
1. Two (2) to three (3) team members report to the event location for a presentation/interview at the time and place stated in the conference program.
2. The LEAP Response will be judged for semifinalist teams.
3. Ten (10) finalists will be announced during the conference awards ceremony.

REGULATIONS

Preliminary Round

A. Participants must understand the fundamental concepts and principles of the sustainable architecture that they are implementing. Research should focus on the country's environment, climate, natural resources, and economy.

B. Documentation materials (comprising a "portfolio") are required and should be secured in a clear front report cover. (Click [here](#) for a sample.)

C. The report cover must include the following single-sided, 8½" x 11" pages, in this order:

1. Title page with the event title, the conference city and state, the year, and the team ID number; one (1) page
2. Table of contents
3. A description of how the team interpreted the design challenge and an explanation of the style and merits of the solution; two (2) pages
4. A description of the country's environment, climate, natural resources, and economy; three (3) pages
5. A schedule of finish materials for all interior and exterior surfaces of the architectural design (this is different from the list of the model construction materials); one (1) page
6. A reproduction copy of original hand drawings and printer/plotter-generated copies of CAD drawings for the required drawings (each drawing to be submitted on maximum drawing sheets cut size B [11" x 17"] with appropriate scale size noted on the drawing); pages as needed
   a. Original floor plan/s of the design
   b. Landscape plan
   c. Diagrams explaining design elements
7. A list of references and credible resources; a minimum of three (3) different types of resources must be used; examples of resources include, but are not limited to, books, interviews, professional journals, websites, magazines, etc.; pages as needed.
8. Plan of Work log that indicates preparation for the event, as noted by date, task, time involved, team member responsible, and comments (see Plan of Work log in the Forms Appendix).

D. Display and model

1. The display must include:
   a. Model of the solution or model of a system used for the design
   b. The chosen country's name
   c. A world map clearly indicating the location of the chosen country, the location of the current year's national TSA conference, and the distance in miles between the two (2) locations
   d. A flyer or brochure that provides basic information and facts about the chosen country (one [1] piece of 8 1/2" x 11" paper)
   e. The team's documentation portfolio
2. The size of the display may not exceed 15" deep x 3' wide x 4' high.
3. Models or prototypes, must fit within the allotted display space.
4. A/C electricity may not be used.
5. Dry cell or photo-voltaic cells may be used for power, if desired.
6. Any power source used must fit within the maximum display area.
7. If operating instructions are necessary, they must be clearly displayed.
8. No viruses, live plants, or animals may be used as a part of the display.
9. No harmful or illegal substances may be displayed.
10. Violation of regulations 8 or 9 above will result in disqualification.

**Semifinal Round**

A. The semifinalist presentation/interview, which must include two to three (2-3) team members, will not exceed ten (10) minutes.

B. The presentation must be based on the display and the portfolio. No additional materials or devices will be allowed for the presentation.

C. The LEAP Response:
   1. Teams document the leadership skills the team has developed and demonstrated while working on this event, and on a non-competitive event leadership experience.
   2. Find the specific LEAP Response regulations in the LEAP Program section of this guide, and on the TSA website.

**EVALUATION**

Evaluation is based on:

1. Preliminary round: The documentation and display
2. Semifinal round: The presentation/interview and the content and quality of the LEAP Response

Refer to the official rating form for more information.

**STEM INTEGRATION**

This event has connections to the STEM standards of Science, Technology, and Engineering.

**CAREERS RELATED TO THIS EVENT**

This competition connects to one or more of the careers below:

- Appraiser
- Architect
- Construction manager
- Interior designer
- Urban and regional planner
OFF THE GRID

EVENT COORDINATOR INSTRUCTIONS

PERSONNEL
A. Event coordinator
B. Judges:
   1. Preliminary round, two (2) or more
   2. Semifinal round, two (2) or more
C. Assistants for check-in, two (2)

MATERIALS
A. Coordinator’s packet, containing:
   1. Event guidelines, one (1) copy for the coordinator and each judge
   2. TSA Event Coordinator Report
   3. List of judges/assistants
   4. Stick-on labels for entries, as needed
   5. Results envelope with coordinator forms
B. Tables for entries
C. Tables and chairs for event coordinator and judges

RESPONSIBILITIES
A. At the conference:
   1. Attend the mandatory coordinator’s meeting at the designated time and location.
   2. Report to the CRC room and check the contents of the coordinator’s packet.
   3. Review the event guidelines and check to see that enough judges/assistants have been scheduled.
   4. 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.
   5. At least one (1) hour before the event is scheduled to begin, meet with judges/assistants to review time limits, procedures, and regulations. If questions arise that cannot be answered, speak to the event manager before the event begins.

B. Preliminary Round:
   1. Check in the entries at the time stated in the conference program.
   2. Anyone reporting who is not on the entry list may check in only after official notification is received from the CRC.
   3. Late entries are considered on a case-by-case basis and only when the lateness is caused by events beyond the participant’s control.
   4. Requirements for attire do NOT apply during check-in only on the first date of the conference.
   5. Place a team identification number stick-on label in the lower right-hand corner of each display.
   6. Secure the entries in the designated area.
7. Judges independently assess the entries.
8. Decisions about rules violations must be discussed and verified with the judges, event coordinator, and CRC manager to determine either
   • to deduct twenty percent (20%) of the total possible points in this round or
   • to disqualify the entry
   • The event coordinator, judges and CRC manager must all initial either of these actions on the rating form.
10. Submit semifinalist results to the CRC for posting.
C. Semifinal Round:
    1. Judges conduct semifinalist presentation/interview.
    2. Decisions about rules violations must be discussed and verified with the judges, event coordinator, and CRC manager to determine either
       • to deduct twenty percent (20%) of the total possible points in this round or
       • to disqualify the entry
       • The event coordinator, judges and CRC manager must all initial either of these actions on the rating form.
    3. Judges determine the ten (10) finalists and discuss and break any ties.
    4. Review and submit the finalist results and all related items/forms in the results envelope to the CRC room.
    5. Manage security and removal of all materials from the area.
Record scores in the column spaces below.

Evaluators: Using minimal (1-4 points), adequate (5-8 points), or exemplary (9-10 points) performance levels as a guideline, record the scores earned for the event criteria in the column spaces to the right. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: an “adequate” score of 7 for an X1 criterion = 7 points; an “adequate” score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met.
### Design Challenge (30 points)

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Minimal performance 1-4 points</th>
<th>Adequate performance 5-8 points</th>
<th>Exemplary performance 9-10 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness of design (X1)</td>
<td>The design is ineffective in meeting the needs of the challenge.</td>
<td>The design is somewhat effective in meeting the needs of the challenge.</td>
<td>The design is clearly effective in meeting the needs of the challenge.</td>
</tr>
<tr>
<td>Aesthetic appeal and functionality (X1)</td>
<td>There is little to no evidence of consideration of aesthetics and curb appeal in the design; systems in the model do not match or work with the design.</td>
<td>There is some evidence that aesthetics and curb appeal have been considered in the design; most systems in the model match or work with the design.</td>
<td>There is clear evidence that aesthetics and curb appeal are fully and effectively integrated into the design; all systems in the model work with the design.</td>
</tr>
<tr>
<td>Creativity and innovation (X1)</td>
<td>The design lacks originality and exhibits few, if any, creative and/or innovative applications.</td>
<td>Some unique, innovative, and creative concepts are incorporated in the overall design.</td>
<td>Unique, creative, and innovative approaches are fully incorporated into the design.</td>
</tr>
</tbody>
</table>

**DESIGN CHALLENGE SUBTOTAL (30 points)**

### Display and Model (60 points)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Display components (X1)</td>
<td>Display is unorganized and/or is missing three (3) or more components.</td>
<td>Display has most components and is generally organized; it has sufficient content.</td>
<td>All components are included in the display content and the organization is excellent.</td>
</tr>
<tr>
<td>Communication of solution (X1)</td>
<td>The description of the country and design is unclear or vague; there is little to no mention of the sustainable design features.</td>
<td>The description of the country and design of the style are included and they are adequately presented.</td>
<td>The description of the country and design of the style are clear, effective, and convincing.</td>
</tr>
<tr>
<td>Creativity (X1)</td>
<td>Display lacks originality; none or very few design principles are integrated in the display.</td>
<td>Some resourcefulness and ingenuity are evident in the display; essential design principles are generally used effectively.</td>
<td>There is clear evidence of an inventive, unique, and creative display; essential design principles and elements are integrated.</td>
</tr>
<tr>
<td>Brochure (X1)</td>
<td>The brochure is missing or is not effective in communicating the solution to the challenge and the country chosen.</td>
<td>Most of the brochure is well designed and informative about the solution to the challenge and country chosen.</td>
<td>The brochure effectively informs the reader of the solution to the challenge and the country chosen.</td>
</tr>
<tr>
<td>Model (X2)</td>
<td>The model is not informative and does not effectively nor accurately represent the design/feature.</td>
<td>Most of the model is informative and accurately represents the design/feature.</td>
<td>The model effectively displays the solution to the challenge and accurately represents the design/feature.</td>
</tr>
</tbody>
</table>

**DISPLAY AND MODEL SUBTOTAL (60 points)**

Rules violations (a deduction of 20% of the total possible points for the above section) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: __________________________

**PRELIMINARY SUBTOTAL (170 points)**

### Semifinal Presentation/Interview (83 points)

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Minimal performance 1-4 points</th>
<th>Adequate performance 5-8 points</th>
<th>Exemplary performance 9-10 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization (X1)</td>
<td>Participants seem unorganized and unprepared for the interview; illogical explanation of the problem and solution is presented.</td>
<td>Participants are generally prepared for the interview; explanation of the problem and solution are generally communicated.</td>
<td>Interview is logical and easy to follow; the problem and solution are communicated in a concise manner.</td>
</tr>
</tbody>
</table>
## Semifinal Presentation/Interview continued (83 points)

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Minimal performance 1-4 points</th>
<th>Adequate performance 5-8 points</th>
<th>Exemplary performance 9-10 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulation (X1)</td>
<td>The interview is full of illogical thoughts that lack clarity, and/or there is insufficient information provided describing the project.</td>
<td>The interview is somewhat logical, easy-to-follow, and/or there is sufficient information provided describing the project.</td>
<td>The interview is clear, concise, and there is ample information provided describing the project.</td>
</tr>
<tr>
<td>Delivery (X1)</td>
<td>The team is verbose and/or uncertain in its interview; participants’ posture, gestures, and lack of eye contact diminish the interview.</td>
<td>The team is somewhat well-spoken and clear in its interview; participants’ posture, gestures, and eye contact are acceptable in the interview.</td>
<td>The team is well-spoken and distinct in its interview; participants’ posture, gestures, and eye contact result in a polished, natural, and effective interview.</td>
</tr>
<tr>
<td>Knowledge (X2)</td>
<td>Team members exhibit little understanding of the concepts in their project; answers to questions may be vague.</td>
<td>Participants exhibit a general understanding of the concepts in their project.</td>
<td>Participants show clear evidence of a thorough understanding of the project.</td>
</tr>
<tr>
<td>Team participation (X1)</td>
<td>The majority of the delivery is made by one (1) member of the team; partner(s) may be disengaged from the interview.</td>
<td>Team members generally are engaged in the process, though one (1) member may take on more responsibility than the others.</td>
<td>All team members are actively involved in the interview and responses to questions; there is shared responsibility among the team members.</td>
</tr>
<tr>
<td>LEAP (10% of the total event points)</td>
<td>The team’s efforts are not clearly communicated, lack detail, and are unconvincing; few, if any, attempts are made to identify and incorporate the SLC Practices.</td>
<td>The team’s efforts are adequately communicated, include some detail, are clear, and are generally convincing; identification and incorporation of the SLC Practices are satisfactory.</td>
<td>The team’s efforts are clearly communicated, fully-detailed, and convincing; identification and incorporation of the SLC Practices are excellent.</td>
</tr>
</tbody>
</table>

**SEMIFINAL INTERVIEW SUBTOTAL (83 points)**

Rules violations (a deduction of 20% of the total possible points for the semifinalist section) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: ________________

**SEMIFINAL SUBTOTAL (83 points)**

(To arrive at the TOTAL score, add the PRELIMINARY SUBTOTAL and the SEMIFINAL SUBTOTAL.)

**TOTAL (253 points)**

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Evaluator

Printed name: __________________________ Signature: __________________________