

Rules for the Semi-Final Round West Point Bridge Design Contest

Contest Coordinator: Ms. Cathy Bale, Phone: (845) 534-9472, E-mail: cathy.bale@usma.edu or wpbedc@usma.edu

1. TEAM QUALIFICATIONS

- 1.1 Only registered teams that have been officially invited to compete in the Semi-Final Round are permitted to compete in the Semi-Final Round.
- 1.2 The Semi-Final Round will be conducted from 1:00 p.m.-4:00 p.m. EST on April 8, 2006, at sites chosen by the Semi-Finalists. Any team that is not available to compete at the designated time will be disqualified.
- 1.3 Exceptions to 1.2 above will be considered *only* for cases involving family emergencies and religious observances. To request an exception, contact the Contest Coordinator as soon as the need for an exception is known. Failure to provide a prompt notification will result in disapproval of the request for exception. Under no circumstances will any exception be considered after 12:01 p.m. EST on April 8, 2006. The WPBDC Committee reserves the right to make the final decision regarding all exceptions.
- 1.4 The membership of a team cannot be changed after the Qualifying Round has ended, except under the following circumstances:
 - 1.4.1 If one member of a two-person team *voluntarily* drops out of the contest, the remaining member may compete in the Semi-Final Round as a one-person team.
 - 1.4.2 If one member of a two-person team is unable or unavailable to participate in the Semi-Final Round, then that person is disqualified from the contest, but the remaining team member may compete in the Semi-Final Round as a one-person team.
- 1.5 Under no circumstances may a person be added to a team after the Qualifying Round has ended.
- 1.6 If the Captain of a two-person team drops out or is disqualified, the zone assignment of the remaining one-person team will not change.

2. ON-SITE MONITOR QUALIFICATIONS AND REQUIREMENTS

- 2.1 Each semi-final team must identify an On-Site Monitor who will agree to observe the team during the entire three-hour Semi-Final Round and certify the team's compliance with the contest rules.
- 2.2 The On-Site Monitor must be a teacher or a school administrator (a principal or guidance counselor). A parent of a team member may not serve as an On-Site Monitor for that team. Each team bears full responsibility for obtaining its own On-Site Monitor.
- 2.3 Not later than April 1, 2006, the On-Site Monitor (*not the contestant*) must send an e-mail message to the Contest Coordinator (cathy.bale@usma.edu) providing the following information:
 - Full name of On-Site Monitor
 - School name
 - School address
 - School phone number
 - Home phone number of On-Site Monitor*
 - E-mail address of On-Site Monitor

- Position and/or relationship of On-Site Monitor to contestants
- Team Name
- Name of Team Captain
- Name of Second Team Member (if a two-person team)
- Complete address of site at which contestants will participate in the Semi-Final Round
- Phone number of site at which contestants will participate in the Semi-Final Round (if available)
- An acknowledgement that the On-Site Monitor has received a copy of the “Rules for the Semi-Final Round” and is familiar with his or her responsibilities.

**Note: The Contest Coordinator will generally need to call the Monitor at least once before the Semi-Final Round. We request the home number, because it is often difficult to get in touch with teachers at their schools. We will call this number only as a last resort, and we will not give it to anyone.*

- 2.4 During the Semi-Final Round, the On-Site Monitor is primarily responsible for ensuring that:
 - The team only uses one computer throughout the round. (Rule 4.5)
 - Team members do not collaborate with anyone outside their teams at any time during the round. (Rule 4.7)
 - Team members use only authorized computer programs. (Rule 4.9)
- 2.5 During the Semi-Final Round, a volunteer from the American Society of Civil Engineers may also observe a given team’s performance at its designated site. If such observers’ visits are planned for a particular site, the Contest Coordinator will notify the On-Site Monitor at least 24 hours prior to the Semi-Final Round.
- 2.6 Immediately following the conclusion of the Semi-Final Round, the On-Site Monitor of any team finishing in the top 10 of its respective zone must fill out the On-Site Monitor’s Completion Report, sign it, and return it to the Contest Coordinator by fax (preferred) or surface mail. (Teams will be able to get unofficial results at <http://bridgecontest.usma.edu/2006results.htm> shortly after the Semi-Final Round is complete.) The fax number is (845)938-5522. The On-Site Monitor’s Completion Report form is included at the end of these rules. The form *cannot* be sent by e-mail, because it must be signed. The form *must* be received by the Contest Coordinator no later than April 13, 2006, or the team will not be eligible for the Final Round.

3. SITE REQUIREMENTS

- 3.1 Each team must identify the site at which the team will compete in the Semi-Final Round. The site must be equipped with a reliable Internet connection and a computer with the West Point Bridge Designer 2006 already installed and fully functional. You may find it helpful to have a printer connected to the computer, but this is not required. We strongly advise that you have a telephone nearby, in case you need to call us for assistance.
- 3.2 If two or more teams from the same school will be competing in the Semi-Final Round, these teams must compete at the same location and use the same On-Site Monitor. Exception to this rule can be made in cases where it is physically impossible for teams to compete at the same location; however, such requests for exception must be received by the Contest Coordinator no later than April 1, or they will not be considered.
- 3.3 The team is responsible for providing the complete address of the site to the On-Site Monitor, who will provide it to the Contest Coordinator as described in 2.3 above.

4. CONDUCT OF THE SEMI-FINAL ROUND

- 4.1 Bring a blank, formatted 3.5” diskette or recordable CD with you to the Semi-Final Round.

- 4.2 For the Semi-Final Round, each team will be assigned a new Team Name. The new Team Name will be the same Team Name used for the Qualifying Round, but preceded by the number “2”. For example, if a Team Name for the Qualifying Round was “BridgeBuilder”, the corresponding Team Name for the Semi-Final Round will be “2BridgeBuilder.” (There should be no space between the “2” and your Team Name from the Qualifying Round.) Your password will remain unchanged.
- 4.3 Anytime after 1:00 p.m. EST on April 8, each Semi-Final team should log in to the contest website (<http://bridgecontest.usma.edu>) using its new Team Name and its original password.
- 4.4 After logging in, the team will see a web page describing the procedures for activating the new semi-final design project in West Point Bridge Designer 2006. Teams must follow these procedures exactly, or they will be unable to create and submit designs for judging.
- 4.5 Each team may use *only one* computer for the duration of the Semi-Final Round. A second computer can be available for use as a backup, but this second computer cannot be started up unless the first one malfunctions and is shut down.
- 4.6 If two different computers log in to the contest website using the same Team Name and password, the contest website will detect it, and the team will be disqualified. (Thus, if a team needs to use a backup computer, the On-Site Monitor should call the Contest Coordinator at (845) 938-2478 to report the change.)
- 4.7 During the Semi-Final Round, teams are required to do their own work. Team members may not collaborate with anyone outside of their own team, including the On-Site Monitor. The term “collaboration” refers to all forms of communication, to include verbal, written, graphical, telephonic, and electronic. Contestants may not use e-mail *for any purpose* during the Semi-Final Round. The On-Site Monitor will verify that the team’s design submission is entirely the product of the one or two registered team members. Unauthorized collaboration will result in immediate disqualification from the contest.
- 4.8 Team members may not use any printed, written, or electronic reference materials (except for the WPBD 2006 Help file) during the Semi-Final Round. Team members may not use any previously created designs (printed or electronic) during the Semi-Final Round. Once the round is underway, team members may take handwritten notes and may use a calculator.
- 4.9 During the Semi-Final Round, the *only* computer programs a team may use are as follows:
 - Microsoft Windows
 - The West Point Bridge Designer 2006.
 - A web browser, used *only* for the purpose of submitting designs. (No e-mail!)
- 4.10 After activating the new semi-final design project, teams will use West Point Bridge Designer 2006 to develop their designs. Teams will submit their designs to the contest website using the same procedure as was used during the Qualifying Round. Teams *must* log in with their new Team Names, however. Teams may submit designs *at any time* during the three-hour period of the Semi-Final Round (1:00 p.m. EST - 4:00 p.m. EST). There is no limit to the number of designs each team may submit.
- 4.11 The basis for judging design submissions is exactly the same as for the Qualifying Round. To qualify for judging, the design must pass the WPBD 2006 load test. If the design passes the load test, it will be judged based on cost. Lower cost results in higher standing.
- 4.13 As in the Qualifying Round, duplicate designs will be rejected by the website. Thus it is in a team’s best interest to submit its designs as quickly as possible.
- 4.14 During the Semi-Final Round, teams will receive their *unofficial* contest standing at the time of the design submission.
- 4.15 As soon as possible after the conclusion of the Semi-Final Round, the top five teams (with no more than two teams from any given zone) will be invited to compete in the Final Round of the contest. **Unofficial**

results will be posted at <http://bridgecontest.usma.edu/2006results.htm> as soon as possible after the round is completed. These results will not become **official**, however, until the On-Site Monitors' Completion Reports have been received by the Contest Coordinator. As soon as the Semi-Final results are official, the web page above will be updated accordingly.

- 4.16 Three alternate finalist teams will also be identified and will be invited to compete in the Final Round if any of the other finalist teams are unable to attend.

5. SPECIAL INSTRUCTIONS IN CASE OF CYBER ATTACK OR WEBSITE MALFUNCTION

Consult this section only if you are unable to access <http://bridgecontest.usma.edu/> during the Semi-Final Round on April 8, 2006.

- 5.1 The purpose of this section is to provide procedures to ensure that the Semi-Final Round can be completed successfully on April 8, 2006, even in the event of a "cyber-attack" or a malfunction of the West Point Bridge Design Contest website.

- 5.2 If a Semi-Finalist team is unable to access the contest website during the Semi-Final Round, then that team and its On-Site Monitor should do as follows:

- The On-Site Monitor should immediately call one of the following phone numbers:

(845) 938-2648
(845) 938-2478
(845) 938-4194
(845) 938-3035

It will probably take a while for you to get through. Be patient and keep trying.

- If our website is off line, then we will confirm that fact when you call. If our website is *not* off line (i.e., if you are actually experiencing a local problem with your own Internet connection), then Rule 5.3 below applies.
- If an Internet outage occurs prior to 1:15 p.m. EST on April 8, then teams will not be able to obtain the semi-final instructions from the contest website. (See Rule 4.4 above.) Thus we will provide these instructions to you by phone *when you call in*.
- All Semi-Finalists will be allowed exactly three hours to complete their designs. If an Internet outage occurs after 1:15 p.m. EST (such that teams have already been able to get the semi-final instructions from the website), then the contest will run from 1:00 p.m. to 4:00 p.m. EST, as scheduled. If the outage occurs prior to 1:15 p.m. EST, then On-Site Monitors will control the three-hour time allocation individually for their teams. The three-hour period will begin when the team successfully obtains the semi-final instructions from us by telephone. Thus, even if a given team takes a long time to get through to us by phone, that team will still have three full hours to develop its design.
- The On-Site Monitor is responsible for ensuring that the team receives no more than three hours to develop its design.
- At the conclusion of the three-hour period, the On-Site Monitor will save a copy of the team's final design as a .bdc file on a 3.5" diskette or recordable CD (which should be provided by the team).
- As soon as possible after the completion of the Semi-Final Round, the On-Site Monitor will attempt to send the team's design to wpbedc@usma.edu as an e-mail attachment. We will *immediately* acknowledge receipt of all e-mailed designs.

- If the On-Site Monitor has e-mailed us a design but does not receive an acknowledgement within 15 minutes, then it is possible that our e-mail connection is also not functioning. The On-Site Monitor should then secure the 3.5" diskette or CD on which the final design is saved. If the Contest Coordinator does not receive either of the e-mailed designs, she will contact the On-Site Monitor on Monday, April 10, to make other arrangements.
- As soon as possible after completion of the Semi-Final Round, *all* On-Site Monitors should send the On-Site Monitor's Completion Report, as described in Rule 2.6.

5.3 The procedures described in Rule 5.2 above apply *only* in the case of a malfunction of the West Point Bridge Design Contest web server. These procedures *do not* apply to local problems with *your* Internet connection. Each team is responsible for obtaining reliable Internet access. As long as the West Point Bridge Design Contest website remains operational, any submission of designs by e-mail or surface mail will not be accepted.

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West Point Bridge Design Contest - Semi-Final Round
April 8, 2006 (1:00 p.m. – 4:00 p.m. EST)
On-Site Monitor's Completion Report

I, _____ certify that
(On-Site Monitor's Name)

the team _____, consisting of
(Team Name)

_____ and _____
(Student Name) (Student Name)

completed the Semi-Final Round of the West Point Bridge Design Contest on April 8, 2006, from 1:00 p.m. to 4:00 p.m. EST, and fully complied with all of the contest rules. Specifically:

- The team used only one computer for all design work and design submissions.
- The team members did not collaborate with anyone outside of the team throughout the Semi-Final Round.
- The team did not use written or printed references or previously created bridge designs during the Semi-Final Round.
- The team members did not use e-mail for any purpose throughout the Semi-Final Round.
- I directly observed the team submitting at least one design during the Semi-Final Round.

The team's final design submission had a cost of \$_____. This design submission was entirely the product of the team that submitted it.

(Signature and Date)

Please sign this form and fax it to Cathy Bale at (845) 938-5522, or mail to:
Ms. Cathy Bale
Department of Civil & Mechanical Engineering, USMA
West Point, NY 10996

Fax is strongly preferred. If you do mail the form, please ensure that it is mailed in time to reach us by April 13, 2006. An e-mail submission of this form is not acceptable. The team's standing in the competition will not become official and the team will receive no formal recognition of their participation in the Semi-Final Round until we receive this form.